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PART I.—ESSAYS, MONOGRAPHS, AND CASES.

Chloroform in Delirium Tremens—report of ten cases. By W. M. Chamberlain, M. D., Astoria, L. I.

Few men who have not "written a book" upon the subject, are satisfied with the pathology of the nervous system. In reviewing the literature of Delirium Tremens, we are obliged to conclude that terminology has been indefinite, diagnosis inexact, pathology inadequate, and the net result confusion and uncertainty.

Eberle and Coates tell us, that whatever the disease may be, insomnia is its index; that stimulus is unnecessary; that opium is the *remedium magnum;* and sleep, *coute qui coute*, by its power, the indication. In a neighboring hospital, Dr. Gerhardt taught that nervous depression is the key to all the phenomena; and support, by stimulation and nutriment, the one thing needful. Dr. Klapp and others support a different theory, if we rightly interpret a practice with admits of giving 30 grains of tart. ant. et potass. in the course of a few hours. Consistently they add, free "venesection is a useful adjunct."

Again, we are told that the disease is simply poisoning by alcohol. Elimination by the skin and kidneys is the cure. The physician prescribes a bucket of cold water and a tin cup; nature supplies the appetite; all indications are thus easily answered, and recovery is almost certain.

Another says that the disease is self-limited, and "let it alone" is the corollary.

One finds phrenitis or meningitis pretty uniform, and "exhibits" a coronet of leeches, the ice cap, cold affusion, and blisters. Another sees

the exciting cause in depraved secretions, retained bile and urea; and calomel with diuretics is his sheet-anchor.

One insists that recumbency is indispensable, and compares the value of bed-straps and straight-jackets; a second orders the largest liberty of speech and motion; and a third, alive to the necessity of relieving the brain by the muscular system, visits his patients with a rope's end. Spearmint-tea is remembered as a specific by older practitioners. Assafœtida, valerian, camphor, ether, and chloroform have had their devoted partisans, who sought nothing further from the pharmacopœia. The results of the same methods in different hands have been distractingly various. An eminent man, in charge of one of the largest and best lunatic asylums in the country, tells us that under the "let-alone" plan, he has lost but one patient in seventeen years, and that one moribund at admission; while one of our city institutions, retaining splendid medical skill, in its annual report for 1852, admits 27 deaths from Delirium Tremens. Another hospital, in a distant city, reports for 1853, 162 cases of Delirium Tremens and 88 of debauch, admitted; and in this number, 52 deaths of Delirium Tremens. If all certificates of death from "apoplexy," "epilepsy," "congestion of the brain," &c., by which credit and the feelings of friends are wont to be shielded, could be carefully analyzed, unexpected statistics would appear.

What is to be said of such diversity? It cannot be supposed of many of the modes of treatment above enumerated, that they were inapt to the particular cases upon whose favorable issue their credit stands; or that, in those cases, the particular medication was a matter of no importance. We may not so stultify our teachers. It must be concluded that different authors, giving their own experience in different forms of disease in the drunkard, have claimed a generic name for widely differing conditions. The fatuous insanity of intoxication, the sthenic delirium-e-potu, the spasm and epileptiform convulsion, which mark the toxic effect of alcohol on the surface of the brain; the true Delirium Tremens, with prostration and anæmia of the cerebral mass; the slow paralysis of intellection and motion deepening into coma, which attends retention of bile and urea; the pain and peculiar delirium of cerebritis; and the persistent vigil of mania, have been confounded, perhaps not in the mind of the Physician, but certainly in the definitions of the Author. They do, indeed, so alternate and complicate each other, as to tax to the utmost the most acute observation, and the best-instructed judgment. Though we may well doubt whether the elements of present science have been sufficiently appreciated, yet the hope of a complete rationale and therapeutics of logical induction must be deferred to another age. Suggestions to be elaborated and facts to be compared, are present desiderata. With this feeling, we are disposed to offer some cases, observed and imperfectly recorded without any view to such a report.

They are extracted from our "Case Book," not as a challenge to criticism or a buttress to any theory, but in the hope that they may illustrate the use and power of the great narcotic, Opium, and the greater sedative, Chloroform. In some of them these agents were employed almost without stint or limit, and the effect, in suspended and restored animation particularly, we have not seen elsewhere so fully detailed. They occurred in the Penitentiary Hospital on Blackwell's Island, under the direction of Dr. Wm. Kelly, late Resident Physician, in whose fate, cast-away upon the Atlantic, while we now write, the many who have loved and honored him feel a deep and painful interest.

A few belong to the period, since Dr. K.'s resignation, during which the writer held the medical charge of the Island. Most of them were observed and treated by himself personally, a few by associates in duty there.

During the year 1853, 960 persons, in the various stages of debauch, were sent to the Hospital by the police courts of the city. Almost uniformly such belong to the lowest class in society—prostitutes, thieves, "fighting men," and broken-down vagabonds, who revolve in fixed orbit through their dens of vice and the charitable institutions of the city. Excess, privation, exposure, and chronic disease, are the staple facts of their lives.

They arrive at the Hospital generally on the second, often on the third day after they have been arrested, or picked up by the police. Meantime they have been confined in the station-houses and in the "Tombs," in cells often dark, cold, wet, and comfortless; cut off from all stimulus; unable to take, and sometimes to find, food; oppressed with their degradation, a prey to "horrors," and the scarcely less horrid vision of months of imprisonment. It is not strange, then, that a large number of aggravated cases of Delirium Tremens occurs among them. Of the 960 mentioned above, but 200 are counted on the books of the Hospital as cases of Delirium Tremens. It was intended to exclude from this list every equivocal case; and of the remaining 760, credited with debauch simply, it is believed many might, with much propriety, have been counted as subjects of the graver malady.

It may not be amiss to introduce the elements of an average case of debauch, in this connection. They are somewhat as follows:—

A. B. presents herself at 5, P. M. She is pale, weak, and tremulous. Has been drinking constantly and largely for a week. Since her arrest, 36 hours have elapsed. She has had no sleep, and has been unable to take food. Her pulse indicates irritation and asthenia. The skin is cool, the tongue moist and pale. Last night she suffered frightful hallucinations. She craves liquors, dreads the coming night, and fears she shall die. From the warm bath, she is removed to a warm bed. Three pints of warm infusion of hops are given her. This acts gently but effectually in three ways: first, as an emetic; second, as a diaphoretic; third, as a hypnotic.

When her stomach is quiet, after the vomiting, two or three compound cathartic pills are given her. An hour or two after, she is offered some bread and tea, or some beef-tea; and still later, is required to drink a full draught of ale, containing a drachm of laudanum. Early in the night, she sinks into comfortable sleep, which continues late in the morning. The bowels move, the nervous disturbance is abated, the appetite returns. She has a pint of ale with her food during the day, sleeps well again, and is discharged on the morrow, to recover her perfect strength and health gradually. The case thus managed is a slight affair; neglected, it would probably have been Delirium Tremens. Those hereafter cited are Delirium Tremens, except the second, of extreme severity; and must not be considered, in any sense, *average*. The appeal to chloroform was held to be dangerous, and never accepted save as the "*ultima ratio medendi*."

On admission, patients receive a warm bath, a bed, and light food, if they desire it, from the attendants, before the evening visit of the physician, at 7, P. M. The "punch" mentioned in the reports, except where otherwise specified, consists of a pint of milk, two ounces of brandy, and q. s. of sugar. The chloroform employed was that manufactured by Powers & Weightman, Philadelphia. These items premised, we submit the cases for what they may be worth.

The first is Delirium Tremens; cure, relapse, and final recovery, without the aid of chloroform.

CASE I.—Oct. 31st, 1853, 7, P. M.

Physique.—T. S.; 35; white; Irish; butcher; height, 5 ft. 6; weight, 140 lbs.; skin, hair, and eyes dark; features coarse; frame athletic; temperament, bilious-lymphatic; general condition pretty good.

Symptoms.—Slight gastric irritation, headache, anorexia, quick pulse, dry and warm skin, constipation, slight delirium and tremor.

Treatment.—Emesis, by inf. hum. lup. hot; slight catharsis, by Haust. nigra. Laudanum, gtt. 120, to be repeated according to indications. Ale, Oj., containing tr. hum. lup. f. ℥ii., to be given in four draughts at intervals of an hour.

Nov. 1. Took 360 gtt. tr. opii. Fell asleep at 12½, and remained so until 5 A. M. Febrile disturbance controlled. Is now, 8 A. M., awake, but quiet. ℞ Tr. opii, gtt. 120. Ale and tr. hum. lup. as before. 8 P. M. Went to sleep at 9½ A. M.; continued so for three hours; is now calm and rational. ℞ Ale, Oj.

Nov. 2. Slept all night: seems about well.

Nov. 8, 7 P. M. After one week of apparent health under the strict discipline of the Hospital, and without stimulus except as by medical order, ale, Oj., daily, he became, this morning, uneasy and wild. Delirium incoherent, busy, and apprehensive. ℞ Tr. opii, gtt. 60. Punch, Oj., containing Sp. Vin. Gall., f. ℥ii.

Nov. 9. Did not sleep last night. Is now in much the same mental condition. Constitutional disturbance slight. ℞ Tr. opii, gtt. 60. Punch, Oj. (s. v. g. f. ℥ii.). To have as much punch as he can drink through the day, and sulph. morphiæ, gr. ss. hourly. 5 P. M. No improvement: very delirious; screams and prays incessantly. Increased the stimulus, giving him whiskey (which he prefers) *ad libitum*. 9 P. M. More quiet; pupils contracted, pulse 80, strong; evidently under the effect of opium and morphine. Respirations seven per minute; slight spasms of the extremities. To be carefully watched.

Nov. 10. Slept all night; is now, 9 A. M., sleeping. To have ale, Oj., on waking.

Nov. 11. As above.

Nov. 12. Seems well again.

Nov. 14. Discharged, cured.

In the following case, chloroform was employed. After due preparation, treatment was commenced with narcotics and stimulants. Diligent use for 30 hours showed the insufficiency of these agents. A single administration of chloroform "jugulated" the disease. This case is introduced as the type of a large class.

Case II.—Aug. 10, 1853, 7, P. M.

Physique.—I. P.; 28; white; Irish; butcher; height, 5 feet 10; weight, 145 lbs.; temperament, bilious-nervous; condition, good.

A habitual drunkard for many years. Has been drinking brandy freely, and working in ice-houses. Presents the ordinary characters of Delirium Tremens. Is perfectly wild and unmanageable.

Treatment.—After freeing the stomach and bowels, ordered tr. opii, f. ℥ i. every hour, for five hours, unless he should sleep; and a small quantity of stimulus.

Aug. 11; A. M. Treatment continued. No sleep or improvement. 10 P. M. No improvement. Chloroform administered with ease, and happy effect.

Aug. 12. Slept nine hours.

Aug. 20. Is well.

The third case was more aggravated than either of the preceding. True Delirium Tremens, partially subdued during the first night of observation, progressive in intensity during the following 36 hours, under the ordinary treatment; becoming critical on the third night; resisting the repeated use of chloroform; persistent under the full effect of opium, on the fourth day and evening; and finally subdued by the anæsthetic, on the fourth night.

CASE III.—Dec. 23, 1853, 7, P. M.

Physique.—S. B.; æt. 32; white; English; height, 5 ft. 8; weight, 165 lbs.; book-keeper; dark hair and eyes, regular features, rather full habit; bilious-lymphatic temperament, with tokens of the scrofulous diathesis. A man of habitually intemperate habits, for the past three months in a constant debauch.

Symptoms.—Little or no excitement; skin and bowels inactive; prostration well marked; tremor of limbs and tongue so great that he cannot stand, lift a glass to his lips, or articulate his words. Motions not unlike those of chorea.

Treatment.—Emesis with inf. hum. lup., ℞ ol. ric. f. ℥ i. tr. opii, gtt. 100. Punch through the night.

Dec. 24, 9 A. M. Slept two hours; is quiet, but wandering. Tr. opii, gtt. 120. Punch and ale. 7 P. M. Condition and treatment the same.

Dec. 25, 9 A. M. Did not sleep at all. Is more delirious. Continued stimulus. ℞ Tr. opii, gtt. 40, every hour for five hours. 10 P. M. Very delirious; skin blanched; perspires abundantly. Chloroform by inhalation. Anæsthesia continues but fifteen minutes. Repeated four times in two hours, without permanent effect. Condition as before inhalation, or somewhat worse. Ordered him to be freely fed with strong milk punch, and to take tr. opii, gtt. 50.

Dec. 26, 9 A. M. Did not sleep at all. Continue opium, gtt. 20, hourly, and stimulus. 10 P. M. Sleepless and furious; pupils a point. Chloroform by inhalation, to the approach of stertor. Spasm and laryngismus during its exhibition. Effect transient. Repeated: effect permanent.

Dec. 27. Slept 7 hours; is calm and rational, still under the effect of opium.

Dec. 28. Delirium Tremens no longer. Under treatment for constitutional syphilis.

The fourth case is more violent than the preceding, but otherwise a parallel (except in the *internal* use of chloroform), until the night of the 25th of January. At that date, after anæsthesia had been vainly invoked, the prognosis became unfavorable. Renewed inhalation was followed by unforeseen asphyxia; but it would appear that even at that alarming moment the disease was conquered, and the final convalescence initiated and secured.

CASE IV.—Jan. 23d, 1853; 7, P. M.

Physique.—H. J., æt. 38; white; Scotch; architect; height, 5 ft. 11; weight, 170 lbs.; robust; well developed; of good constitution; health uniform, except when disturbed by excesses.

Present condition.—"Has been on a long spree;" very much excited, talkative, facetious; eye wild; limbs tremulous; tongue ditto, and pale; skin warm, rather dry; pulse 80, full; conversation coherent. "Has had no sleep for three nights."

Treatment.—Full emesis by warm infusion of hops, followed by tr. opii, gtt. 75, when the stomach became quiescent. 10 P. M. Condition the same; effect of opium not perceptible; same dose repeated. 12 P. M. Pupil free; general condition the same.

Jan. 24th, 9 A. M. Slept but little; appears much as last night; bowels not open. ℞ comp. cath. pil. iii, and an enema of warm water at 3 P. M.; milk punch, Oj. Appetite good. 7 P. M. Bowels freely moved during the day; is now quite calm, rational, quiet, and disposed to sleep; skin normal. No further treatment.

Jan. 25th, 5 A. M. Called to patient, who is confused, wild, noisy; insists upon getting up. 7 A. M. Condition the same. Desiring to try sedation by chloroform, ordered ℞ chloroform ℥ i, mucil. acaciæ, f. ℥ viii, sumat, f. ℥ i, sing. horis. 4 P. M. Has taken f. ℥ vi, as above, with happy effect; is much more quiet; has been gently restrained in bed, and fed *ad libitum*. 7 P. M. Delirium increasing (often observed at the approach of night); is very restless and noisy; disturbs the house, and requires forcible restraint. Applied the bed-straps, and administered chloroform by inhalation to the approach of stertor, twice, without permanent good effect. Left him at 8 P. M., with a rapid and feeble pulse; prostration and excitement great; having ordered tr. opii, gtt. 60, milk punch, Oj, containing s. v. g. f. ℥ iv, to be given as rapidly as possible. 12 P. M. Condition the same; repeated above. 3 A. M. Do. do.

Jan. 26th, 9 A. M. No improvement perceptible; pupil quite fine; pulse rapid and feeble; excitement great and constant; continued the punch, without the opium. 4 P. M. Has remained screaming, struggling, and convulsed during the day; surface bathed in cold perspiration; pulse exceedingly rapid and feeble; muscular activity still great; face wears an aspect almost cadaveric; has been forced to take two pints of punch, containing 8 oz. of brandy, during the day. There seems no prospect of this spasmodic activity ceasing, except with the total loss of power. Administered chloroform by inhalation; spasm and laryngismus very great; anæsthesia brief, and followed by no good effect. Repeated. Respiration suddenly *suspended* at the instant when it was becoming stertorous. Having no aid at hand, the pulse was not questioned. Performed artificial respiration by elevating and depressing the ribs with the hands; function rallied in a few moments, becoming gradually stronger and more easy. Left the patient at 7½, entirely quiet, and inclined to sleep. Before inhaling the chloroform, he took tr. opii, gtt. 75. 10 P. M. Quite quiet; has had an

hour's sound sleep. 12 P. M. Has slept another hour and a half. Ordered punch freely, and tr. opii, gtt. 75, if he should become wakeful.

Jan. 27th, 9 A. M. Quiet and dozing; has slept four hours; taken a pint of punch and six ounces of brandy since last note; continued treatment.

Jan. 28th. Sleeps continuously; is otherwise well.

Feb. 2d. Discharged from treatment, cured.

Case five was in itself less severe, but tells a very similar story for chloroform.

CASE V.—Dec. 13th, 1852, 7 P. M.

Physique.—H. L., æt. 60; white; Irish; height, 6 ft.; weight, 170 lbs.; dark hair and eyes; fair skin; well developed; of strong constitution; bilious-sanguine temperament; health generally good. "Has had yellow fever and phagedenic chancres, but no other sickness which confined him to bed."

Present condition.—Drunk. ℞ pulv. ipecac. ℈i, to be followed by a full draught of inf. hum. lup.; tr. opii, gtt. 70; ale, O ss.

Dec. 14th, A. M. Did not sleep last night; is up, and walks about the ward; eats well; bowels regular; appears strange, but hardly delirious. 6 P. M. As above. ℞ punch, Oj, s. v. g. f. ℥ v; tr. opii, gtt. 150. 12 P. M. In raving delirium; chloroform by inhalation; anæsthesia and sleep followed.

Dec. 15th, 10 A. M. Slept three-fourths of an hour after the chloroform, and no more during the night. Repeated stimulants and narcotics of last night. 10 P. M. In the same condition of furious delirium; chloroform by inhalation; spasm and laryngismus during its exhibition; slept 1¾ hours after. 12 P. M. Re-administered chloroform; at the point of stertor patient *ceased to breathe; pulse at wrist imperceptible;* cold affusion restored him, and he immediately dropped asleep.

Dec. 16th. Slept all night, and continues asleep; is well and rational.

March 2d. Died of pneumonia.

In the following case, after an hour and three quarters of futile anæsthesia, to the point of stertor, having in view the issue of the preceding cases, we determined to proceed to the *verge* of asphyxia. This *occurred* suddenly, and by it the disease was as suddenly vanquished. Artificial respiration completely restored life and all its organic functions. The patient slept; and, after eight hours of sleep, rose again to the level of consciousness and reason, perfectly well.

CASE VI.—Feb. 9th, 1853, 7, P. M.

Physique.—C. C., æt. 36; white; native of Maine; height, 5 ft. 7 in.; weight, 170 lbs.; laborer; eyes black; hair do, thick and coarse; well developed; athletic; bilious-sanguine temperament. A drunkard for several years, and for six months past almost constantly intoxicated; drinks brandy.

Present condition.—Bewildered, not delirious; tremor of tongue and limbs excessive; skin florid, hot; pulse 100, soft; from ancle to middle third of the thigh, on right side, red, swollen, and hot. ℞ Cold water dressing. "Has not vomited since last drink." 7½ P. M. ℞ Inf. hum. lup. O. iij; prompt emesis follows; vomiting persistent. 11½ P. M. Haust. nigra, f. ℥ ii; tr. opii, gtt. 75.

Feb. 10th, 1 A. M. Still continues to vomit at intervals; tr. opii, gtt. 75. 2½ A. M. Tr. opii, gtt. 60. 4½ A. M. Do. 6½ A. M. Do. 7 A. M. Fell into uneasy sleep, with intervals of waking and delirium; pupil contracted, iris active. 11 A. M. Tr. opii, gtt. 60. 3 P. M. Do. 8 P. M. Has slept quietly for two hours; no stimulus has been given; patient has taken a little food; bowels freely open. 10 P. M. Quiet, with intervals of sleep.

Feb. 11th. Has slept most of the night; inflammation of the skin and cellular tissue of the leg subsiding; is quiet, but not much disposed to sleep. Tr. opii, gtt. 60. 10 P. M. Has remained in the same condition all day; is still quiet and rational; tremor of limbs passed away. ℞ Tr. opii, gtt. 60.

Feb. 12th, 9 A. M. Seems about well. 12 M. Wild and wandering. 8 P. M. More delirious than at any previous note. Tr. opii, gtt. 125. 9½ P. M. Delirium furious; entire surface bathed in cold perspiration. ℞ brandy freely; tr. opii, gtt. 75; patient has taken more than an ounce. 10 P. M. Ordered chloroform, ℥ i; inf. lini. f. ℥ viii; sumat, f. ℥ i sing. horis.; brandy continued freely.

Feb. 13th, 6 A. M. More quiet; has not slept; is weaker. ℞ 30 drops of laudanum and an ounce of brandy every hour, the brandy in egg nogg. 10 A. M. More calm; continued treatment. 3 P. M. Still wandering and watchful; has taken a half pint of brandy and 250 drops of laudanum since morning. ℞ sulph. morphiæ, gr. i. 8 P. M. No better; pulse weak and rapid; surface clammy and pale. Chloroform by inhalation to stertor; no permanent sleep or anæsthesia; patient was kept under its influence for an hour and forty-five minutes without benefit, when it was determined to push its effects; after a few seconds of stertor, *respiration was instantly suspended; pulse* 0; artificial respiration for a few moments is followed by quiet and continuous sleep.

Feb. 14th. Slept uninterruptedly all night.

Feb. 15th. Sleeps almost continuously; functions all regular.

Feb. 17th. Discharged from treatment, cured.

Case seven is double. The first attack was managed with comparative ease by chloroform, and its subsidence was marked by some of the symptoms of cerebral inflammation. The second is remarkable. Opium, for a time, secured quiet, but could not, even in extreme quantity, procure sleep. The phenomena of anæsthesia were unusual. Asphyxia, in the other cases, was a sudden invasion; in this, it advanced by slow progression for several minutes after the inhalation was suspended. We watched it until it was consummated in death. Re-animation was more difficult than before, and the disease was not cured. The conflict of narcosis and Delirium Tremens, during the following night, was extremely interesting. After what was thought to be a cure, on the evening of Oct. 30th, the disease was re-instated, and as to its subsequent character we are much in doubt. It was treated as Delirium Tremens with cerebral inflammation.

CASE VII.—June 28th, 1853.

G. S., æt. 35; white; native of Long Island; height 5 feet 10; weight 160 lbs. A sinewy, athletic frame, bilious-nervous temperament; for fourteen years in the naval service; of intemperate habits, indulging periodically in a "spree" once in 3 or 4 months. Has been drinking very freely for four weeks. Is rational, but much excited. Tremor of limbs excessive. Pulse full. Face wears a dark, venous flush.

June 29th. Came in late last night; received no treatment except a small dose of laudanum. This A. M. free emesis and catharsis. Excitement great; delirium furious. Ordered tr. opii, gtt. 60; whiskey, f. ℥ iv; milk punch, Oj. 9 P. M. Is worse; perfectly uncontrollable. ℞. sulph morph., gr. i. 11, P. M. Chloroform by inhalation, preceded by a draught of brandy, f. ℥ ii. Complete anæsthesia secured.

June 30th. Slept half an hour under chloroform, and remained quiet and dozing all night; this morning fell into a sound sleep. 6, P. M. Slept until 5, P. M. Ord. punch freely, sulph. morphia, gr. i.

July 1st. Slept all night; is rational, and apparently well. July 3d. Complains of slight pain and dizziness in head; has no other trace of his late illness. Ord. C. Cups, ℥ iv., to temples. July 6th. Discharged cured.

Oct. 20th. Re-admitted. Has been drinking freely for a fortnight. Appears much as at previous entry. Functions, except the nervous, not much disturbed. Pulse full, 100. Ord. emesis, with hop-tea, but failed to secure it. It was not thought worth while, at that hour, to make another attempt with a different agent. ℞ Tr. opii, gtt. 120. Repeated at 9, P. M., and at 11, with sp. vin. gall, f ℥ iv.

Oct. 27th, 9 A. M. Slept very little; is quiet, but busy and wakeful. Determined to procure sleep by opium and stimulus, if possible. 11, P. M. Took 120 gtt. tr. opii, at 9 A. M. Repeated at 11, 6, 7, and 9, P. M.

Ale and punch freely through the day and evening; condition as in the morning. A little while since became suddenly alarmed; started up and passed rapidly along the scale of excitement and delirium until he became perfectly incontrollable. Pupils fine. Chloroform, by inhalation. Violent spasm, with opisthotonos and epileptiform convulsions during exhibition; the body remaining rigid for a moment or two; consciousness and motion returned together, and immediately. Chloroform again. Spasm less; laryngismus so great that its administration was suspended. Respiration very slow and labored; *becomes more and more difficult; finally ceases altogether.* Artificial respiration by pressure upon the thorax attempted unsuccessfully for nearly two minutes. Insufflation, followed with pressure, was maintained for some minutes, when the natural breathing was resumed, and continued at seven respirations per minute, stertorous. Slept 20 minutes. When he woke s. v. g, f. ℥ iv. was given, and chloroform again administered; little or no spasm of any sort followed. Slept a few moments. Woke and talked incoherently for a short time, then gradually settled into a profound, but uneasy slumber. Respirations 5 per m. Pulse feeble, 130. 1, A. M. As bad as ever. Raves and throws himself about the bed incessantly. Is evidently narcotised, though sleepless; for, in the moments of fitful sleep and exhaustion, which, alternate with his paroxysms, he drew but 4, 3, and, in one case, 2 inspirations in a minute. During the paroxysm respiration was very rapid; this condition continued until 3, A. M., when he became more quiet. Slept in longer intervals. Was very narrowly watched until 6, A. M., when I left him overcome with sleep. Pupils still contracted.

Oct. 28th. Sleeps, but is restless. Takes stimulants freely. 6, P. M. Has slept all day. Pupils normal. Pulse 110. Volume and force normal. Is quiet and almost rational. ℞ Tr. opii, gtt. 60. s. v. g., f. ℥ iv.

Oct. 29th, A. M. Slept all night. Continued treatment. P. M. Slept until noon, when he dressed himself, went to the carpenter's shop and worked the remainder of the day; apparently as well as usual. Returns this evening, complaining of pain in the head and dizziness. No physical signs in this connection perceptible. Ord. C. Cups to temples, ℥ iv.; tr. opii, gtt. 60. Repeat at 8, P. M. In the course of the night became incoherent and delirious again. It was thought to be relapse of Delirium Tremens, occasioned by his exposure and fatigue during the previous afternoon. The strictly cerebral symptoms did not engage attention particularly at the time.

Oct. 30th, 9, A. M. Complains of the pain in the head, which was not sufficiently considered, and has not slept at all during the night. Ordered him punch and laudanum. 10, A. M., becoming more violent. Increased the stimulus. 11, A. M., do. do. 12 M., as above. At this stage, pupils being slightly contracted, no marked heat of the head, or febrile

disturbance, *suspecting, only*, that cerebral inflammation might have supervened, ordered emp. vesicans, 5 × 4, to nape of the neck; sinapisms to feet and legs; hyd. chlor. mit, 1 gr. hourly; all restraint to be removed, the patient being watched to prevent injury to himself or others. Tr. opii, gtt. 100. Calls for liquor, and will not be pacified without a drink. 6, P. M., bowels have moved and blister has drawn; patient still very much excited and voluble. The delirium is active and busy, but seems less intense. 10 P. M., more quiet, and seems inclined to sleep.

Oct. 31st. Slept 2½ hours during the night. Delirium persists, but in a milder form. Has taken upwards of 16 grs. hyd. chlor. mit., in varying quantities. From this date the delirium seemed to wear off, not in such manner, however, that the effect could be assigned to any medication employed. Hygienic conditions were enforced, and opium, with brandy, continued.

Nov. 2d. Slept all night.

Nov. 5th. Discharged, well.

The successful issue of the following case is clearly due to chloroform. Life was saved at its extreme hour.

CASE VIII.—April 26th, 1853.

F. E., æt. 49; white; stage-driver; native of Mass.; height, 5 ft. 5; weight, 150. Nervous-sanguine temperament. Habitually temperate. Has led a life of hardship and exposure, but has usually been well. This is his "first attack of horrors." "Has been drunk for a week." *Present condition.*—Has acute bronchitis of no great severity. Bears the marks of constitutional depression, with great nervous excitement. Bowels constipated; stomach irritable, vomiting everything taken. Pulse very feeble; tongue moist, red, and tremulous. Is very delirious, but good natured—the passion of fear predominating.

Treatment.—The notes do not mention in what way the bowels were moved—probably by enema. The patient was fed with ice and brandy in small quantities, and tr. opii, gtt. 120, at 9, P. M.

April 27th, 9 A. M. Slept none at all. The brandy and ice have nearly controlled the vomiting, which now occurs at infrequent intervals. Pulse 70, feeble. Tongue heavily furred and dry. Pupils natural. Continued treatment, ordered punch, Oj., and tr. opii, gtt. 60, to be repeated at 12 M. 4, P. M., still raves, and struggles with his attendant. Continued punch, freely. ℞ Tr. opii, gtt. 60. Repeat hourly, until 9 o'clock. 10, P. M., has taken tr. opii, gtt. 360. Find him standing in his bed, trembling with apprehension at the slightest noise. Pupils very fine. Ord. punch, *ad libitum*, to be soothed, not restrained.

April 28th, A. M. Has not slept. Remained quiet through the night.

Calls for whiskey. Is tractable, though wild. Ord. whiskey, f. ℥ ii., tr. opii, gtt. 60, hourly, until noon, and punch freely. 9, P. M., is worse. Delirium is now violent. Pulse feeble, uncertain, about 70. Respiration 28; irregular. Ordered s. v. g, f. ℥ iv., tr. opii, gtt. 120, to be repeated at 10. 11, P. M., no amendment. Chloroform by inhalation. Anæsthesia transient. Repeated at frequent intervals for two hours. Left him quiet and inclined to sleep.

April 29th, 8, A. M. Slept two hours. Is now quiet, but very weak; raves incessantly, and says he shall surely die if he cannot have whiskey. Ord. whiskey, f. ℥ iv. Pulse 90, feeble. 10, A. M., has been diligently plied with whiskey and punch. No amendment visible. Chloroform again. Produces spasm, but no sleep. Continued the inhalation one hour. 5 P. M. Appearance unfavorable. Face haggard; eyes protruding; chin tremulous; tongue flabby, pale, and moist. Pulse extremely feeble. Gave him ale in full draught, with tr. lupulin, f. ℥ iii., and tr. opii, gtt. 120. Ord. emp. vesic. 3 × 3, to nape. 7, P. M., no change for the better. Ord. punch, Oj., and whiskey, f. ℥ iv. 8, P. M., tr. opii, gtt. 120. In restless and desperate delirium. 9, P. M., do. Tried to quiet him by soothing talk, with partial success.

April 30th, 8 A. M. Slept a few moments at a time, in all about one hour, last night. Pulse very feeble; tongue dry. Delirium persists. Ord. stimulants, *ad. lib.* 12 M. An hour since, watching his opportunity, escaped from the ward; was brought back with difficulty. 9, P. M., continued treatment. Patient no better; to be carefully watched, and to take tr. op., gtt. 120, through the night.

May 1st, 9 A. M. Evidently sinking. Pulse very feeble; tongue less dry. Delirium constant; is very difficult to manage. Continued stimulus. 12 M., ord. tr. opii, gtt. 120. Pupil normal. To have egg-nog instead of punch: as much as he can be made to take. Pulse can scarcely be felt at wrist. 4, P. M., no improvement. 6, P. M., face livid, pulse at wrist 0. Heart's action extremely feeble—70. Can, with difficulty, move in bed. Says he must die. Calls for liquor, and takes sp. vin. gall., f. ℥ iv. at once. 8 P. M., pupil contracted. Has taken no opium since noon. Chloroform by inhalation. The heart extremely feeble; *its action becomes less—less—wavers. Chloroform continued. Respiration* 4—8 *per minute. Limbs spasmodically convulsed at intervals. Heart's action stronger; pulse returns—fuller—respiration more steady. Patient sleeps—semicomatose.* In five minutes wakes again. Chloroform again administered, for 10 minutes, at the end of which comes quiet and profound sleep. Limbs perfectly relaxed. 12, midnight, still asleep.

May 2d. Is better. Has slept all the time since last note; now is wakened only to take food and brandy.

May 4th. Has slept constantly—as above.
May 9th. Is well.

In case nine, we have again chloroform, attended with both asphyxia and syncope. From both the patient was restored. So far as we can trace the influence of the anæsthetic, it seems to have been favorable. The death which followed, was clearly by exhaustion.

CASE IX.—Sept. 24th, 1853, 7, P. M.

Physique.—A. H., white, Irish, æt. 36, height 5 ft. 2, weight 110. Has a dark skin, hair, and eyes, bilious temperament, good constitution. Health has been uniform, except when disturbed by periodical excess in drinking during the last eight years. Comes in after eight days of continued debauch, during which she says she has eaten scarcely anything and has had no sleep for 72 hours. *Condition.*—Tremulous and excited, delirious, but can understand and answer questions. Remains muttering to herself incoherently. Tongue coated. Pulse and skin about normal. Ordered.—Punch, Oj. and brandy, f. ℥ iv., tr. opii, gtt. 60, to be followed by 30 more in two hours.

Sept. 25th. Slept none last night. Condition as above. Nervous disturbance is the only prominent feature of her case. ℞ Tr. opii, gtt. 60, to be followed by 30 hourly. Punch and brandy as last night. 8 P. M., called to patient by the report "that she has had a fit." She permits no one to approach her, is pale, feeble, and very wild. From the account of attendants, has evidently suffered epileptiform convulsions. She is resolved to make her escape from the ward. Ordered restraint—tr. opii, gtt. 60, brandy ad libitum. 10 P. M. No improvement. Gave her tr. opii, gtt. 50, two ounces of brandy, and proceeded to administer chloroform to deep anæsthesia, resuming the administration whenever she seemed about to pass from under its effects. This was continued for half an hour. During the progress of anæsthesia subsultus came on, deepening in intensity, until it amounted to general spasm of the muscles. This ceased when the effect of chloroform was completely secured, and in the reverse order attended the progress of re-animation. Did not think it best to repeat the inhalation. Ordered attention and urgent support, with punch, &c.

Sept. 26. No sleep last night, was more quiet, and seemed occasionally to doze. Pulse 120—feeble. Ordered chloroform internally by the following formula. ℞ Tr. opii, f. ℥ ss., tr. camphor f. ʒ i, chloroform, ʒ ii, tr. hum. lup. f. ℥ iii, to take a table spoonful every 2nd hour. Stimulants continued. 10 P. M. Patient remaining in the same condition, it was determined to try inhalation again. After giving a drachm of laudanum, it was commenced. At first it produced spasm similar to, but more violent than

on the previous night. It was suspended at complete anæsthesia, and the patient seemed to pass into sound sleep. Woke in ten minutes. Inhalation resumed, with the same symptoms. After a few inspirations *the subsultus and respiration ceased simultaneously and instantly.* The head was thrown back over the pillow, the eyes open and fixed, the face pale and cadaveric. *No pulse, no sound at the heart.* Cold affusion failed to resuscitate, mechanical motion of thorax and trachea also. Insufflation by the mouth was promptly resorted to, and maintained for ten minutes, when the natural function and consciousness were completely restored. She was watched, in the hope that at the gate of death the vicious circle of her dreams might have been broken, but we were soon convinced that the delirium was as high as ever. Ordered brandy ad libitum, and tr. opii, f. ʒ ss.

Sept. 27th. Patient is bright this morning, says she is well, her appetite is good. Has not slept, though quiet. A pleasanter delirium than yesterday; seems occupied with her household affairs. Ord. tr. opii, gtt. 50, once in two hours, and as much punch as she can be made to drink. In the course of the morning she rose and walked in the ward. 9 P. M. Fiercely delirious again, requires restraint with straps. Continued treatment.

Sept. 28th, 5 A. M. Conscious and rational—dying. 5h. 10m., died. *Autopsy* shows nothing of importance, a normal brain, neither anæmic nor congested, a little serum under the arachnoid and in the ventricles, hardly more than usual in death from any cause.

Case ten is one of sedation by the internal use of chloroform.

Case X.—Jan. 13th, 1853, 7, P. M.

Physique. J. M., 39, white, Ireland. Height 6 ft. 3, weight 166 lbs., shoemaker. A man of immense proportions and strength; an animal, passionate nature, bilious sanguine temperament, and uniform health (except when disturbed by drunkenness), in all climates and circumstances. A soldier in the British and American armies, and a bully of the town. Has been twice treated for delirium tremens in this Hospital. Present condition good. Functions, except the nervous, all regular. Says he has "been drinking day and night for three weeks, all the time." Is sane, but much alarmed and shaking badly. Ord. emesis, with inf. hops; ale, Oj.; tr. opii, gtt. 150.

Jan. 14th. Slept most of the night. Skin warm and dry, pulse a little accelerated, face flushed. Ord. pulv. ip. co. ʒ i; 10 grs. every two hours. Ale, Oj. 7 P. M. Skin soft, moist, pulse has lost its excitement; is somewhat delirious; pupil free. ℞ Tr. opii, gtt. 100; punch, Oj.; ale, Oj. 10 P. M. Is furious, attempting all manner of violence. Confined him in bed and continued treatment, tr. opii, gtt. 20, hourly.

Jan. 15th. Has not slept during the night. Is still furious. Pupil

small; administered chloroform by inhalation, three times, without permanent advantage; anæsthesia very transient. ℞ chloroform ʒ i, in mucil. acaciæ, f ʒ viii, ʒ i, hourly. Under this medication patient became calm, and remained half asleep during the day. Toward night delirium returned. Ord. continued support and stimulus and tr. opii, gtt. 30, every second hour.

Jan. 16th. No sleep as yet. Resumed chloroform internally, as yesterday. After the third dose, the patient fell into a doze. Ordered tr. opii, f. ʒ i.

Jan. 17th. Slept most of the night. Is conscious, rational, and doing well.

Jan. 20th. Quite well.

The foregoing pages contain all which we have seen of asphyxia and syncope, after chloroform. Will they not justify the assertion that death from these causes should seldom occur? Other cases might be presented illustrating varieties and complications in the disease; others still, detailing idiosyncrasies in the patient; but with these our present purpose ends.

In producing artificial respiration we have not found it necessary to lift the epiglottis and draw forward the tongue, according to the proceeding of M. Ricord. Neither have the galvanic battery and the use of diffusible stimulants been imperatively required.

Finally, if any should expect the suggestion of a scheme for managing the various forms of disease comprehensively classed "Mania a potu," we would answer, the subject is large and difficult. Science does not yet fully illuminate it. In the field of Nervous Pathology, speculation has projected theories, observation has gathered facts. Each has done good service. The science of the physician equips and instructs the doctor, the art of the doctor endorses and seals the physician. The mind which commissions all its faculties and reviews all their work, will not rest in any system of rules, which must be in great measure empirical.

The management of these cases should be *par excellence* independent.

"See with your own eyes, and judge with your own judgment," is the maxim of a much-respected teacher. With present light upon this point, we shall resort to chloroform only when other medication fails, and *then* we shall not hesitate to seek any measure of its full effect which the occasion may indicate.

The Religious Duties of Physicians to their Patients.

To the physician who is also a professing Christian, no apology, surely, is necessary for inculcating the duties just mentioned; though all must be aware how seldom even an isolated remark appears in a medical journal, which recognizes any religious duty as devolving upon physicians in their strictly professional relations. The cause of this silence we cannot now inquire into. It is enough for the present to say, that it is not because infidelity is more common in the medical than in other professions; for this is not the fact, as we will hope to show in a subsequent article.

The particular duty we now propose to inculcate, is that of endeavoring to promote the religious welfare of patients, especially in all cases in which there is reason to anticipate a fatal termination.

Many of our readers will perhaps remember the three letters upon this subject, addressed, some eighteen years ago, by Dr. T. H. Burder, of London, to a junior practitioner. To these our attention has been called anew by their publication in a pamphlet of 40 pages, by the American Tract Society; and we shall here reproduce some of Dr. Burder's ideas, while we give expression to such as we have long entertained in connection with this important subject.

It is intended, in all cases when possible, that the pages of this journal shall be addressed to the entire medical profession. Would that each member of it could regard the following remarks as addressed to himself personally as a Christian physician! Would that each were such an one, in this respect, as the writer of the letters alluded to! But let no one sneer, who does not consider any such duties as binding upon himself. This is a subject demanding at least the respect and the consideration of all.

The letters of Dr. Burder point out the difficulties of the undertaking to promote the religious welfare of patients, the encouragements to be expected, and the most eligible methods to be adopted.

It cannot be denied that Christian physicians, when incessantly pressed by a laborious practice, find it very difficult to perform those daily personal duties, with interest and regularity, which no Christian should ever omit. The Sabbath may be to them a day of augmented toil, instead of repose; and any season set apart for such duties, may at any time be engrossed by the claims of others in suffering. But all this is only to be known, in order to be guarded against; and strong as is the temptation to remissness, there is no valid excuse for more than an occasional neglect of such duties. We could mention physicians of the highest eminence, from Boerhaave to the

present time, whose example verifies the remark just made. But if in any instance neglect of personal and domestic duties is unavoidable, so much the more incumbent is the duty of promoting, so far as may be, the religious welfare of patients, while occupying the time with them.

And yet it is lamentable to perceive the effects, in a religious point of view, too often produced by *success*, as it is called, in practice. Not a few instances could we mention, in which a young practitioner, of the most elevated and exemplary Christian character, in twenty years became irreligious, negligent, and perhaps even skeptical, because he has meantime become a *successful* man in his profession! What a success is this! a success for which he has bartered his own soul, there is too much reason to apprehend, and those of many others he might else have been instrumental in saving! Young men of Christian education and Christian hopes, who are engaged in the practice of our noble art, does not this subject demand a seasonable and a solemn consideration?

It is easy to say that it is enough for the physician to prescribe for the patient; and that he cannot perform this duty so well if he has also another object in view. We reply, that it is his first duty to bring all his powers to bear upon the treatment to be recommended; *having done this*, he is then as free, for the moment, as any other man, to make such remarks as he may deem proper upon any subject. And a single suggestion is often more fruitful in good results than a protracted discourse, which we shall not, of course, be understood to recommend. It is easy also to remark, that all this is extra-professional and trenches upon the prerogatives of the clergyman; but from the very fact that the remarks made by the physician are *not* professional, they will be received candidly, as having been prompted by a feeling of kindness and real interest in the patient's welfare, and therefore will be more likely to produce the desired effect. The physician can also best judge precisely when to speak and what to say; for he best understands the patient's circumstances, temperament, and mental condition at the time. And besides, a few remarks from the physician secures the best possible preparation of the patient's mind for religious conversation with a clergyman.

We shall not be understood, therefore, to inculcate the duty under consideration as a substitute for the professional services of clergymen, but as the best preparation for, and the best aid to, their successful performance. Here is the point where the two highest human occupations meet; and where the minister of the Gospel and the Christian practitioner should never be found at variance. Both would save the soul of their dying fellow-being. The physician is to obtrude no sectarian efforts at such a time: how, then, can they disagree?

It is, however, the physician's prerogative to decide when it is proper for

even the clergyman to perform his peculiar duties for the welfare of the patient. We have seen a soothing influence produced by a brief and appropriate prayer, which anodynes had been given in vain to procure. But we have also seen high excitement and even wild delirium produced by similar services rendered at an improper time, or in an injudicious manner.

Nor is there any occasion for disagreement between the physician and the clergyman on this point. Both desiring the highest good of the patient, the latter must surely admit that the former can judge better than he can, both as to the proper time, and the amount of strength the patient possesses. We have, however, been too often grieved to perceive the manifestation, on the part of the clergyman, of the feeling that his motive alone—the spiritual welfare of a sick fellow-creature—is a sufficient reason for the exercise of his peculiar office at such times and in such a manner as may to him seem best. If the physician is not a Christian, the minister will, perhaps, often find himself put off till it is forever too late; but in the other case, he certainly has no cause to complain if any importunity on his part is checked by the medical attendant, and the proper time specified. We have never hesitated ourselves to take this responsibility; nor shall we, in any case, surrender it. Nor has it often been our lot to excite displeasure in this way. Our experience accords with Dr. Burder's belief, that "the enlightened ambassadors of the Saviour, so far from entertaining a feeling of jealousy, do really hail with cordial satisfaction such auxiliaries in their trying visits to the bed of sickness and death."

2. The *encouragements* to the performance of this duty are such as arise "from the peculiar facilities which the profession affords; from the Divine benediction which may be humbly yet confidently anticipated; and from the success which has already crowned similar efforts."

The suggestions of a conscientious physician are, in the chamber of sickness, received with almost unlimited confidence. He, therefore, can say, without danger of having his motives misinterpreted, what another cannot. Whatever he may say is also regarded as a sincere expression of interest in the sick person under his care. He has, therefore, in many instances, an almost unlimited influence. He also knows how to address the patient in the way most calculated to impress and least to injure; and thus will not, by producing excitement, diminish the prospect of the recovery, as another probably would. He also has constant opportunities of associating some serious remark with his professional counsel. Shall such opportunities be lost? Let us be on our guard lest "timidity, apathy, or worldly policy deprive us of the exalted privilege of being instrumental in saving a soul from death, and thus adding another jewel to the Redeemer's crown." That such efforts have often been successful, is well known. The "Village Sermons," left by her physician for a young lady soon to die of phthisis, to

read—though his interest in her religious welfare displeased her friends, and thus prevented his visiting her afterwards—were yet instrumental in her conversion before her death.

3. The *methods* best to be adopted will vary exceedingly with the circumstances. But it can never be improper to inquire, as if incidentally, if the patient would not like to converse with some pious friend; or if his mind, now that he is confined by sickness, does not naturally turn to the uncertainty of life, and the necessity of preparing for its close. It is never improper to allude to persons who have found a sick bed their greatest earthly blessing, since they there first found that peace which this world can neither give nor take away. But if such indirect methods do not accomplish the object, we are still bound to be *faithful*, and, therefore, to use more direct language. We often have no time for delay, and shall regret any temporising in such momentous circumstances.

We have spoken of this duty as incumbent on the Christian physician in every case, at least of dangerous disease. But it should also be remembered that the period of *convalescence* is also favorable for the reception of religious impressions. Then is the patient in a condition to appreciate the goodness which has been manifested in raising him from a bed of languishing, and even threatened death; and more grateful and more impressible in respect to these important subjects.

Let us, then, realize more than we are accustomed to do, how fearful a responsibility rests upon us, as Christians, in our professional intercourse with our fellow men; and while it is our first great effort to save, or, at least, to prolong life, let us remember that to others as well as to ourselves,

"It is not all of life to live,
Nor all of death to die."

E. R. P.

Exsection of the entire Ulna; the functions of the Arm and Hand preserved.

By J. M. CARNOCHAN, M. D., Professor of Surgery in the New York Medical College, Chief Surgeon to the State Emigrants' Hospital, &c.

MODERN surgery is chiefly indebted for the revival of the operation for the exsection, partial or complete, of the long bones, to Moreau, Percy, Champion, Pelletan, and Dupuytren. Large bones of this class have been exsected in their contiguities: thus, Butts, of Virginia, exsected the entire radius; the fibula has been removed from one extremity to the other; and even the entire lower jaw has been at once removed, at both temporo-maxillary articulations, with satisfactory results. No instance, however, has been, as yet, recorded of exsection of the entire ulna. The following case

shows that the entire ulna can be removed, and the functions of the upper extremity be retained, nearly in their original perfection.

Case.—P. Cavanagh, a native of Ireland, aged 30, of sanguineous temperament, strumous aspect, without syphilitic taint, a shoemaker by trade, while splitting wood with a heavy axe, sprained his arm so severely that, as he expresses it, the sinews seemed to give way. During the night following the accident, he was awakened by intense pain about the region of the wrist joint. This was speedily succeeded by swelling of the upper and forearm, as high up as the humero-scapular articulation. In this condition, he consulted a physician, who prescribed an anodyne liniment, to be applied to the arm. The application was used for five weeks without abatement of the pain. Fomentations of hop leaves were then resorted to. These failing to bring relief, and the malady still progressing, the patient sought the advice of Dr. Webster, of Geneva, who made along the arm two deep incisions, which were followed by a slight discharge of pus and much blood. Cataplasms were then used for about eight weeks, with no relief to the pain or diminution of the tumefaction. In the month of July, 1852, Cavanagh entered as a patient the surgical division of the State Emigrants' Hospital.

At the time of his entrance he was much enfeebled and emaciated; the presence of irritative fever showed that the constitution was sympathizing with the local disease; the hand, forearm, arm, and shoulder presented one dense, hard, tumefied, and shapeless mass, of a purple hue, and extremely sensitive when handled: the pain was unremitting, being more severe by night than by day; the circumference of the diseased forearm was three times greater than that of the corresponding portion of the healthy arm; and the density of the tissues was such, that, in connection with the wan and emaciated aspect of the patient and the purple hue of the integuments, there was reason to conjecture that the disease was one of malignant character. A lotion of acetate of lead and tincture of opium was ordered to be kept on the arm, which was also to be enveloped in oil-silk. Quinia, porter, and good diet were likewise ordered.

August 1st, 1852. Three weeks having elapsed, and the tension and swelling still remaining unabated, free and deep incisions were made through the tissues of the forearm; but the relief obtained by this operation was but momentary. The arm was now kept enveloped in a flax-seed cataplasm, with which was incorporated some extract of stramonium. During the months of September and October, the constitutional treatment was but little varied. Iod. ferri, and iod. potassii were at times substituted for the quinia; an anodyne draught of morphia was regularly given at bed-time. The topical applications consisted alternately of cataplasms, anodyne liniments, anodyne fomentations, of *eau sedative*, of extract

of stramonium. While this treatment gave no relief to the pain, several abscesses had formed along the ulnar region of the forearm, and these openings left sinuses leading to the surface of the ulna; which, by means of the probe, could be felt, denuded of its periosteum.

The diagnosis now became more precise, and his card was ordered to be marked "Ostitis, caries and necrosis of the ulna, possibly, also, of the radius." The general tumefaction, at this period of the disease, rendered it impossible to ascertain that one bone alone was affected. The patient deriving no benefit from the use of the various medicamental means which had been resorted to, was recommended to remove from the Hospital to the country, for a change of air, and, at the same time, was directed to use tonic remedies and a generous diet. The patient consequently took his discharge from the Hospital, Dec. 1st, 1852.

On the 18th May, 1853, he was again admitted, having, in the interval, followed the instructions he had received. The shoulder and upper arm were now found to have resumed their normal appearance and size; but the elbow joint was very much enlarged, and almost incapable of motion. The forearm was still dense and hard, and was, moreover, much increased in size, presenting along its ulnar aspect a purplish hue, with various openings and sinuses, from which, at times, small portions of dead bone had been eliminated during the patient's absence from the Hospital. The wrist joint was also limited in its movements, and supination and pronation could not be performed. The general health was somewhat improved, but the constitution still showed signs of participation in the local malady, and a dull and aching pain continued to extend along the arm towards the axilla.

The indications of treatment, now, were to keep up and improve the general tone of the system, and to use topically anodyne applications, in conjunction with ioduretted preparations. To this end, during the following seven months, the constitution was supported by the internal exhibition of quinia, carb. ferri. precip., iodide of potassium, syr. iodide of iron, sarsaparilla, infusion of prunus Virginiana, wine, porter, generous diet, &c.; while locally, anodyne and ioduretted cataplasms, fomentations, unguents, and the warm bath, were sedulously employed. But, from this treatment, no perceptible amelioration was obtained; the arm was still much tumefied and hard; the sinuses remained unclosed, discharging daily considerable quantities of purulent material, in which, at times, were found minute portions of diseased bone. At this time, also, Jan. 1st, 1854, the ulna could be more distinctly traced, and felt to be enormously enlarged, apparently through its whole extent; but there was good reason to infer, as no sinus could be traced to the surface of the *radius*, that this latter bone was entirely sound.

Medicamental and dietetic treatment had now been used for nearly two years; the arm was still useless, and a painful incumbrance; and the ulti-

mate cure of the malady appeared to be beyond the resources of the medicinal art. The patient was becoming impatient, and anxious to obtain relief. The resources of operative surgery seemed now to offer the only prospect of attaining a serviceable result; and, as a point of practice, the alternative presented itself of amputation of the arm above the elbow, or of exsection of the entire diseased bone. From some recent investigations which I had been prosecuting upon the lower animals, I had convinced myself that the entire ulna, although forming the chief part of the elbow joint, could be removed without materially impairing either the strength of the limb or freedom of its movements. Accordingly, I gave the preference to exsection of the bone, rather than to the severe mutilation of amputation of the arm, and performed the operation on the 14th January last.

Operation.—The patient was brought into the amphitheatre, and placed supine upon the operating-table. The assistants were arranged so as to maintain firmly the trunk and lower extremities, and be in readiness to hand the instruments and to sponge the wound. Chloroform was cautiously administered. While under the full influence of the anæsthetic, the position of the patient was changed so that he lay partly on the left side.

One assistant held and supported the upper arm of the diseased limb, compressing at the same time the humeral artery; another, seizing the hand and wrist, rotated inwards the limb from the shoulder-joint, and carried the pronation of the forearm so far as to cause the palm of the hand to look directly outwards. The elbow-joint was now slightly flexed, and the hand elevated. This twisted position of the ulna upon the radius placed the ulna upon the posterior and outer aspect of the forearm, and rendered it more easily accessible.

The limb thus placed, the assistants maintaining the arm and forearm steadily, standing upon the right side of the patient and placing the fingers of the left hand upon the integuments of the forearm towards the elbow, with a strong, straight, sharp-pointed bistoury, I made an incision along the posterior and inner aspect of the ulna, commencing at the lower part of its superior third and extending downwards to a point over the extremity of the styloid process. This divided the tegumentary layers and fascia, which were found dense, matted, and infiltrated. The tendon of the *extensor carpi ulnaris* was pulled back, and the bone exposed. This was found rough, enormously enlarged, and presenting numerous oval foramina and several cloacæ, which communicated externally through the integuments. It was now apparent that the bone must be disarticulated. To effect this at the carpo-ulnar articulation, a transverse incision, about an inch long, parting from the lower extremity of the first incision, was made across the back of the wrist. The superficial tissues were here reflected,

and the tendon of the *extensor carpi ulnaris* was carefully detached from its groove on the lower part of the ulna. The dissection was now carried along the anterior surface of the lower portion of the ulna, and the soft parts were detached from the bone as far as the interosseous ligament, the ulnar artery and nerve being carefully avoided. The soft parts were now detached from the posterior surface of the ulna, avoiding injury to the extensor tendons. An attempt was then made to pass a chain-saw around the ulna through the interosseous space opposite the lower part of the middle third. This was found impossible, on account of the approximation of the enlarged ulna to the radius, and the almost complete obliteration of the interosseous space. To divide the bone at this point, a small convex-edged saw was used. The bone thus divided, the interosseous ligament was detached downwards, and the lower fragment of the ulna was disarticulated from its inferior attachments to the radius, fibro-cartilage and the carpus.

It now remained to isolate and detach the upper fragment. The first incision was now prolonged upwards along the posterior surface of the ulna, so as to end at the upper part of the olecranon, opposite its outer edge. To this a terminal incision was joined, which extended transversely across the back of the elbow-joint as far as the inner margin of the ulna. The soft tissues were now dissected from the bone upon its posterior and anterior aspects, as far as the interosseous ligament and as high up as the insertion of the *brachialis internus* muscle. The bone was next seized and pulled from the radius, and a knife, curved flatwise, was passed close upon its interosseal margin, and grazing the bone, the interosseal membrane was divided upwards, the soft parts being held apart, and the interosseal and ulnar arteries protected.

The elbow-joint was now flexed, and opened behind by entering the bistoury close to the inner edge of the olecranon, and the attachment of the triceps extensor was next divided by cutting directly outwards. The ulnar nerve was now found, and hooked aside until farther dissection of the soft tissues was effected from the inner aspect of the joint and the upper part of the bone. The lateral ligament was next divided. The bone still remained firmly attached, chiefly by the coronary ligament and the insertion of the *brachialis anticus*. The ulna was carried backwards so as to make this muscle tense, and by carefully grazing the coronoid process with the knife the tendon was detached. Some difficulty was here presented in avoiding the humeral artery, which lay in close proximity to the enlarged coronoid process. The bistoury was now passed between the ulna and radius, and the coronary ligament divided. A few remaining fibres were divided, and the bone was completely detached.

During the operation there was a considerable flow of venous hemorrhage, which soon ceased upon removal of compression from the upper

arm. The arterial bleeding was arrested by torsion of a few arteries around the elbow-joint. The operation was performed in the presence of many pupils and professional gentlemen; and I was ably assisted during its different steps by Dr. Glück and Dr. Melville, of this city, and by Drs. Hensley, Gould, Harris, and Thomas, the Resident Assistant Surgical Staff of the Hospital.

Progress of Union.—After the operation, the patient recovered slowly from the influence of the chloroform, the pulse remaining below 50 for some hours; anodyne ordered at bed-time. Next day, Jan. 15th, the pulse 100—full and regular; oozing of blood has occurred to some extent; during the night, patient has been restless, and has suffered much pain in the arm. Sol. sulph. morph. at bed-time.

Jan. 16th. Pulse 100—not so full or strong; no more oozing of blood has occurred, and the patient feels more comfortable, having slept, and suffered but little during the night. The first dressing removed in the afternoon: for four inches above the wrist joint, the wound seems to be uniting by first intention.

Jan. 17th. Pulse 83—regular; general condition good. Ol. ricini ordered. The wound dressed; suppuration profuse. The lips of the wound have an unhealthy aspect; four of the sutures come away. Anodyne in the evening. The patient is ordered to commence in the morning with solution of sulphate of quinia.

Jan. 18th. Patient has slept badly, having suffered much pain, during the night, along the arm; pulse 80. Dressed the wound, which has assumed a better appearance; suppuration less, but little adhesion. Beef-tea ordered.

Jan 19. Pulse 90; patient has slept tolerably well. Wound dressed; discharge of pus decreasing, and union progressing from the wrist upwards; free discharge of synovial fluid from the elbow joint, upon removal of the dressing.

Jan. 20th. Pulse 84. Wound dressed; favorable progress. Full diet allowed. Quinine continued. No undue inflammatory action at either articulation. Arm still kept in the same position.

21st. Patient has suffered much pain at the elbow joint during the night. In the afternoon, wound dressed; doing well; there is free motion at both elbow and wrist joints; discharge of synovia still coming from the elbow joint.

Jan. 22d. Everything going on well. Wound dressed; but little discharge, except at the several tegumentary orifices which existed between the wrist and elbow before the removal of the bone; but little synovial fluid coming from the joint.

Jan. 25th. General condition of the patient excellent; pulse 80, and

natural. Appetite good. Only slight oozing of synovia from the elbow; no pain. Splint upon which the arm rested in a state of pronation, dispensed with; forearm now bent at a right angle, and held in a position between supination and pronation, while a light, well-padded splint, extending from the elbow to the extremity of the fingers, is placed and bandaged along the front thereof, to support the radius; limb, thus adjusted, supported by a sling passed around the neck. Patient allowed to sit up.

Jan. 29th. First splint removed, and the arm, which had been maintained fixed for the last four days, adjusted, and bandaged to another splint, jointed and formed of two pieces, one for the upper arm, and another for the forearm; the joint being opposite the elbow, in front: by this arrangement the forearm still kept in semi-pronation, and radius supported, while, by regulating the angle of the splint, by a mechanism for that purpose, the forearm can be gently and gradually extended.

Feb. 5th. During the use of both splints, dressings carefully attended to, by removal and re-adjustment at suitable intervals. To-day, upon removal of the splints and dressing, healing process of the wound found to be entirely completed; the tissues about the wrists and elbow joints being entirely consolidated, and free motion at both articulations possible by the patient himself, without any assistance.

Feb. 10th. Limb still supported by a light bandage, and by the last splint, for the purpose of allowing the tissues along the line of the inner aspect of the forearm to become further consolidated. Health of the patient is now good; he walks about like a well person. He is still upon tonic treatment, and is allowed generous diet.

Feb. 15th. Removed the splint; patient allowed to use his arm. General health entirely restored.

Feb. 18th. Five weeks after the operation, discharged from the Hospital cured.

Appearance of the Arm; and its Functions.—With the exception of a depression, and the cicatrix along the ulnar aspect of the forearm, there is no deformity of the limb.

The functions of the arm are preserved in a remarkable degree of perfection. The power of prehension is unimpaired; and flexion and extension at both the elbow joint and at the wrist joint can be performed with facility —supination and pronation can also be effected—abduction and adduction at the wrist joint can be performed; as also flexion and extension of the fingers, as before the operation; sensation and nutrition are as perfect as on the arm and hand of the opposite side.

None of the large nerves or arteries were injured during the exsection of the bone, and the muscular tissue was carefully preserved from the action

of the bistoury, with the exception of the cubital origin and insertion of those muscles which are attached to the upper portion of the ulna. These had to be divided during the detachment of this portion of the ulna.

Flexion at the elbow joint is chiefly effected by the *biceps flexor*, which is inserted into the tubercle of the radius; but the humeral origin of the other flexor muscles—such as the *flexor sublimis digitorum communis*, the *flexor carpi ulnaris*, the *palmaris longus*, the *flexor carpi radialis*, and the *pronator radii teres*—remaining uninjured, they also serve as auxiliaries in this function.

The *triceps extensor* and *anconæus* were, necessarily, entirely detached during the operation; but extension of the forearm is sufficiently performed by the action of the *extensores carpi radialis longus et brevis;* by the *extensor communis digitorum*, the *extensor minimi digiti*, and by the *extensor carpi ulnaris;* all of which muscles pass from the external condyle of the humerus, to be inserted on the posterior surface of different metacarpal and phalangeal bones of the hand.

Flexion of the wrist joint is effected by *flexor carpi radialis, palmaris longus, flexor carpi ulnaris;* extension, by the *extensores carpi radialis* and the *extensor carpi ulnaris.* Adduction, also, is effected by the *extensor carpi ulnaris;* while abduction results from the action of the *extensores carpi radialis.*

Flexion of the fingers is chiefly effected by the *flexor sublimis digitorum communis*, and the extending function of the phalanges results mainly from the action of the *extensor communis digitorum.*

Pathological condition of the bone.—The diseased ulna is delineated in the plate, Fig. 1, and presents all the characteristic manifestations of prolonged inflammatory action of a high grade. The bone is enormously expanded from one extremity to the other—at the base of the coronoid process it measures in circumference 5½ inches; and its weight is 8 oz., minus 20 grs., the weight of a recent healthy adult ulna varying from 2½ to 3 oz.

Bony vegetations have assumed the acicular form on the radial aspect of the bone, on a line with the attachment of the interosseous ligament, as far down as the junction of the middle with the lower third—the acicular formations also prevail on and below the coronoid process. At all other points around the upper extremity of the bone, irregular mammillated appearances exist, with innumerable enlarged, round, and oval foramina. These enlarged foramina, in conjunction with the hypertrophied condition of the bone, are characteristic signs of protracted inflammatory action, as was long ago demonstrated by the Goodsirs, of Edinburgh.

Along the inner and posterior aspect of the bone exist some eight *cloacæ*, five of which are in the upper third of the bone: two in the middle third;

and one near the styloid process. One of these *cloacæ*, situated between the coronoid and olecranon processes, communicates with the interior of the elbow joint; while another, situated at the lower part of the bone, communicates with the ulno-carpal articulation.

The other *cloacæ* pass deeply into the interior of the bone, ramifying extensively, like sinuses, in different directions along the inner texture; some of the sinuses containing portions of bone in a state of necrosis, and more or less detached. From these *cloacæ*, which opened externally upon the integumentary surface, large quantities of purulent fluid, mixed at times with portions of dead bone were discharged.

At the middle third, the circumference of the bone, by measurement, is four inches, being $\frac{5}{8}$ in. larger than the shaft of an adult femur. At this part, also, the round and oval foramina are abundant.

The lower third of the bone is also extensively hypertrophied, being, at its upper part, $3\frac{3}{8}$ inches, while, at the base of the styloid process, the circumference is $2\frac{5}{8}$ inches.

The section of the bone, as represented in the plate, Fig. 2, shows the appearance of the central portions. Here the influence of high inflammatory action, and its consequences, carious ulceration, necrosis, and eburnation, are plainly manifested. The greater part of the interior of the bone is exceedingly dense and compact. The surface of the osseous section is in some parts tinted of a dark purple hue; at other parts it is whitish and dense, like ivory, blastema having been here thrown out so as to obliterate the spongy structure, the Haversian canals, the lacunæ, and canaliculi. The right lateral half of the section [as seen in fig. 2] also shows the presence of two carious abscesses in the interior of the bone, which communicate externally with cloacæ and the integuments. In one of these abscesses a piece of sequestrum is situated, partly detached. Vide plate, Figs. 1 and 2.

20th Feb'y, 766 Broadway.

Morbus Coxarius.—Dr. March and his Reviewer.

SUUM CUIQUE.

COMMON usage imposes upon the periodical press the obligation of pronouncing its opinion on scientific publications of any importance. This kind of review, however, that complies merely with a literary custom, is to the medical public neither desirable nor profitable. The duty of a reviewer is of a higher and more sublime order; he should lay before the reader the material that would enable him to judge for himself eventually of the merits of the work; he should also conscientiously analyze the inferences of

the author, drawn from the substance, and test their logical consistency; and to render the review still more useful, he should compare the mode, opinions, and results of the writer's researches with past and present doctrines on the same subject, in order to determine in what respect the publication is corroborative or novel. Such a review would furnish a reliable guide for the medical community, and would be both desirable and acceptable to the individual reader of periodicals. In the moment, however, the review trespasses the boundary of scientific objectivity; attempting to replace or to misrepresent the author's individual opinions with those of the critic, it turns out to be a polemic, which but rarely advances science or promotes any desirable purpose. The amount of acrimony and passion applied, qualifies its degree of decency and decorum.

As a matter of course, reviews of pure objectivity can be accomplished only by stern impartiality, and competency. Prejudice, superficiality, and malice, furnish but a poor medium for reviewing.

Such are the sublime claims which the medical profession are entitled to lay on critics; and the prompt compliance with these exclusively, will insure the influence and usefulness of the review. He who wishes to influence others, must place himself above all party spirit and cliqueism. That is the scale which I now apply to the review of Dr. Alden March's paper on disease of the hip-joint, in No. 2 of the American Medical Monthly.

In the very beginning, I am sorry to say that I meet with a designed acrimony of conception that is by no means called for; nor have the substance and the conclusions of Dr. Alden March's paper found that consideration and credit which the grave subject and the masterly manner deserve, and in which the talented and esteemed Professor of the Albany Medical College has treated it.

The grave charge of assumption, preferred against the author by the reviewer, I must leave him to answer; and believe the defence rests in able hands. But the deep interest which I take in the question mooted by Dr. Alden March, both as surgeon and writer, involves upon me the duty to secure, if possible, a fair discussion on the merits and bearings of the new doctrines propagated by the author and myself. A fair hearing is the least I should think we can expect from the periodical press; and my confidence in the impartiality of the American Medical Monthly is not so much shaken as to decide me against offering these pages to the columns of that journal.

For the sake of placing the reader at once *au fait*, it must be reiterated that Dr. Alden March, Professor of Surgery of the Albany Medical College, has read before the American Medical Association, in May last, a paper on hip-joint disease, subsequently published in the Transactions of that body, in which he stated,—

1. That he had carefully examined the numerous specimens of forty

anatomico-pathological collections, both of Europe and the United States, with a special view of ascertaining the real position of the caput femoris with the pelvis in hip-joint disease; and not finding one amongst all the specimens, the description in the catalogue notwithstanding, with the characteristics of spontaneous luxation, he drew the natural inference from such facts:

(*a*). That spontaneous luxation was by no means so frequent an occurrence as maintained by the majority of surgical writers; and consequently,—

(*b*). That shortening of the affected limb was not invariably attributable to spontaneous luxation.

2. That he had examined patients under his care, afflicted with hip-joint disease, in which the muscles were so much retracted and involved, that he was led to believe those deformities consequent upon that malady, were caused by undue muscular action.

3. The application of anæsthetics and splints proved beneficial in counteracting and removing the undue muscular contraction. He concludes that splints are a most estimable auxiliary in the local treatment of morbus coxarius, and recommends them to the notice of his professional brethren.

Dr. Alden March does not claim priority for those observations, nor does he dispense with constitutional treatment. His position, both as practitioner and scholar, places him above the imputation of having taken upon himself the credit of first recommending the use of splints in hip-joint disease. He leaves Dr. Physick's priority untouched, and satisfies himself by stating facts, and the results of his personal inquiries and observations. The paper is of a highly corroborative nature, and Dr. March is to be understood as having advanced our knowledge much beyond the mark of ordinary attainments. Dr. Carnochan and many others re-digest operations, in periodicals, which have been performed long before, and do not present any new features; but, nevertheless, they are read, and are expected to be wondered at. Wherefore, then, does the A. M. Monthly find fault with Dr. Alden March for having published his observations, and, moreover, on a subject just now of the deepest interest, and by no means sufficiently understood and semiotically appreciated by the profession? This is at least unfair, if not even unjust, and tends to render the benevolent and scientific intentions of the critic rather suspicious. If the A. M. Monthly considers itself justified to tender a review of six pages on the paper of Dr. March, I should conclude the *subject* of the paper itself was of no minor importance.

The review commences its attack upon the paper with a protest against the assertion of Dr. March, that the majority of surgical writers attribute the shortening of the afflicted leg to spontaneous luxation. According to my knowledge of surgical literature, Dr. Alden March is quite correct, and the reviewer proves himself of but shallow information. Liston, though

great as surgeon and author, is but one name, and no majority; whereas, on the other side, to quote but a few, G. L. Petit, Sabatier,* Camper,† Ford,‡ Porsal,§ Desanes,‖ Albers,¶ Froken,** Boyer,†† Larrey,‡‡ Rust,§§ Langenbeck, Firske, Brodie,‖‖ Wattman, and many others have clearly, and do still assert that a material shortening of the leg in hip-joint disease is invariably caused by spontaneous luxation, and the vast majority of practitioners of the present day still adhere to that very doctrine.

The more modern literature of surgery, however, especially that of the last six years, has decidedly altered this numerical proportion in favor of the new conception; but the majority is still against it. Some modern writers on this subject, premise spontaneous luxation in all cases of shortening; others admit it in some instances only (Liston), or allow only a nominal fraction, and this not as the necessary and unavoidable consequence of hip-joint disease itself, at the last stage, so to speak, but as an accident caused by a fall, jerking, pushing, &c., under predisposing circumstances. To these Bonnet, Lorinser, Buehring, March, myself, and others belong.

With the labors of all these inquirers notwithstanding, the present state of our knowledge on morbus coxarius is not yet sufficiently based on reliable facts; papers like that of Dr. Alden March are, therefore, highly acceptable contributions.

Evident as it is, that other writers have come earlier to those conclusions which Dr. Alden March brings forth in his elaborate paper, his labors may, nevertheless, be original. And if the reviewer has had a divination of the advancement of modern surgery in Europe, especially in France and Germany, he should not overlook the fact that the French and German literature is not as accessible to the multitude of medical practitioners in this country as it has been apparently to himself. Considered in this light, the merits of Dr. Alden March's paper are indisputable, having created interest and curiosity amongst the profession, in reference to the subject under consideration, which the reviewer has not excited by his superabundant knowledge.

* *Archive de l'Academie Royal de Paris. Tom. V.*, 791.
† Camper's *Briefe Sieber das Friewillige Hinken der Kinder. Leipzig*, 1784.
‡ Observations on Hip-Joint Disease. London, 1794.
§ Porsal. *Observations de la Nature, &c.* Paris, 1797. Page 200.
‖ *Œuvres Chirurgicales. Tom. I., p.* 314. Paris, 1798.
¶ *Preis Schrift.* Wien, 1807.
** *Preis Schrift.* Wien, 1807.
†† Boyer. 4th volume on Surgical Diseases.
‡‡ Larrey. *Memoires de Chirurgie Militaire. Tom.* 4. Paris, 1817.
§§ Rust. Arthronoology.
‖‖ Brodie. Disease of the Joints.

The review sides with Liston as to the material cause of the shortening of the affected member, and for this purpose quotes the views of eminent surgeons, namely, that the total carious destruction of the neck and head, and large trochanter of the femur, and of the acetabulum, &c., by itself sufficiently accounts for the shortening. From this opinion, I beg to differ, Liston's authority notwithstanding, and believe that the well-merited lustre of his great name will not pale under my opposition to his errors. In order to disprove the reviewer's arguments, I must refer to anatomy and experience. First, I must remind him of the fact that the neck and head of the femur do by no means materially contribute to the actual length of the limb, being connected with the thigh-bone below its superior extremity, and ascending, in males in an obtuse, in females in almost a right angle. A superficial insight into these anatomical conditions, shows at once, that, provided the superior fragment of the so extensively destroyed thigh-bone does not dislocate upon the dorsum ilii, it can not materially shorten the member, though it will approximate the acetabulum. The highest degree of such shortening could not amount to more than 1½ inch. In consulting experience, we find cases in which the shortening varies from 2 to 6 inches; and nothing entitles us to premise such an enormous carious destruction; and its existence admitted, how account for the 4½ inches above the amount anatomically allowable? Again, numerous cases cóme under observation where the hip-joint disease consists merely in synovitis, terminating at an earlier stage, where there is no caries at all, no sore, no discharge, no crepitus. What, may I ask, accounts, in these cases, for the shortening of the member, which may amount to as much as 6 inches, an instance of which is at present in the Orthopædic Institution? And finally, what accounts for the shortening of the leg, of more or less extent, in other diseases in the immediate vicinity of the hip; for instance, in sub-fascial abscesses, where the joint enjoys the most perfect integrity, and where, nevertheless, all appearances are present characterizing those deformities commonly dependent on hip-joint disease.

Thus, the accomplished critic tried to get a safe passage between Scylla (muscular retraction) and Charybdis (spontaneous luxation), and imagining himself to have got a firm ground for his anchorage (carious destruction), he will find instead, his vessel wrecked.

The reviewer is thus necessitated either to return to the obsolete doctrines of Petit, Sabatier, Rust, in premising spontaneous luxation in all cases of hip disease, complicated with material shortening; or, to accept the opinions advocated by Dr. Alden March and myself, as to the muscular cause of almost all malpositions and distortions collateral to morbus coxarius; or to advance some new theory; for that pathological interpretation preferred by Liston and the writer of the review, will absolutely not answer.

The prejudiced opinions of the reviewer do not allow him to conceive the anatomical possibility by which the abnormally retracted muscles contiguous to the hip could originate these deformities, and more especially, as he supposes the concerned muscles to be paralyzed, atrophied, and insensible. He nevertheless admits, at page 131,—

"That the malposition and distortion of the limb in hip-disease is the result of an instinctive muscular act, chiefly affected by volition."

Thus, the reviewer condescends to allow the same interpretation of the collateral symptoms of distortion that has been preferred by Dr. Alden March and myself, although he chooses to apply other words. Indeed, this concession is more than could be expected from a reviewer whose purpose of opposing the author is so zealously manifested, though it must be left undecided whether it has been made only to escape the embarrassment in which, by adopting the opinion that carious destruction is the principal and material cause of shortening of the leg has placed him, or whether it is a mere phrase calculated to fill a space in the journal; or whether it is the proof of his finally perfected conversion; or whether the reviewer means to say that instinctive muscular action, in application to hip disease, is anything else than muscular reflex action, which I should term it.

Whatever it may mean, I am of too generous a nature to believe that the reviewer has knowingly intended to render himself a solidarical accomplice of our supposed errors and misconceptions. I shall therefore dispense with a concession, which was, perhaps, unintended. Nor am I disposed to charge the reviewer with making a logical blunder in placing on the same level "instinctive muscular act" with "volition," two conflicting notions, and of a diametrically opposite nature.

I admit that the part displayed by volition, or muscular reflex action, upon the ultimate completion of deformity in hip disease, is not yet sufficiently inquired into; but, limited as is the present state of our knowledge, we are entitled to decide against volition, and in favor of "instinctive muscular act," or muscular reflex action.

In the first start, it seems to my judgment a contradiction in adjecta, an absurdity, independent of the absolute impossibility of its accomplishment, to suppose for one moment, that, by his own exertion, and merely for the sake of relieving his momentary pains (the reviewer allows remissions), a patient should distort himself in such a fearful manner, rendering himself an object of pity, if not dislike, disabling himself for the execution of business requiring rapid and prompt locomotion; I say, if the deformity was brought on gradually by volition, it would imply also the possibility of reëstablishing, at least to a certain degree, the symmetry of the body by that very medium.

There are, indeed, numerous patients who possess sufficient determination

of will and perseverance, to accomplish the cure of their distressing distortion, provided it was all realizable.

But all exertions in this respect must fail, on account of the material shortening and unyielding rigidity of the flexor and adductor muscles of the thigh. I never heard of any cure having been consummated in this way, until I happened to read No. 1 of the A. M. Monthly. It is stated therein (vide Hospital Records), that by encouraging the movements of the affected limb, Dr. Carnochan had succeeded in removing the deformity and restoring the utility of the limb.* Incomprehensible as these startling results appear to a surgeon, who has acquired some experience on the subject, nevertheless, "Brutus says it, and Brutus is an honorable man."

When I took the liberty of visiting Ward's Island Hospital, about three months ago, the surgeon-in-chief, Dr. Carnochan, had the kindness to show me some of his patients affected with hip-joint disease. I found them all in bed, and apparently not much encouraged, and rather disinclined to move the affected limb, except by the pelvis in the lumbar articulation with the spine, as my patients had done also; and they were, moreover, as distorted and disfigured as any patient I had seen before, the most efficacious treatment of the accomplished surgeon-in-chief notwithstanding. On that very day, and in presence of Drs. Carnochan, Schilling, and numerous students, I placed a patient of the Hospital under the full influence of chloroform; the joint was perfectly moveable in regard of flexion and adduction, but we did not succeed in overcoming the rigidity of the flexor and adductor muscles, which resisted like rods of iron, in spite of chloroform and a considerable mechanical power. Dr. Carnochan was thus enabled, by an *argumentum ad oculos*, to infer that volition, at least in that case, did not retain the leg in its abnormal condition. This statement, of course, does not exclude the possibility that Dr. Carnochan should have, since then, accomplished his

It is proper to state, in this connection, that at the time of the publication of the passage to which Dr. Bauer here alludes, Professor Carnochan stated that our hospital reporter had, by the use of the word "encouraging," given an opportunity for mistake as to the principles of his mode of treatment. Prof. C. *allows* the patient to move if he chooses to do so, but he does not "encourage" him to move contrary to his inclination. This statement is intended not to meet Dr. Bauer's argument at all, but to do justice to this mode of treatment. The following is the passage as it stands on page 73: [*Editor American Med. Monthly.*

"The mode of treatment pursued by Professor Carnochan in morbus coxarius has been very successful. He relies principally on constitutional treatment, abandons the use of splints and confinement, permitting and encouraging the use and motion of the affected side, and allowing the abscess to open spontaneously. The number of cases now in progress of convalescence, the general improvement in the physical appearance of the patients, and the absence of the distressing hectic, indicate the soundness of the principle on which he proceeds."

wonderful cures of hip-disease. But even, admitted that volition should participate in the establishment of the deformity, the reviewer will, at least, concede that the voluntary muscular action very soon escapes the control of the will, and becomes subservient to the organic degeneration that invariably takes place in long-contracted muscles, yielding only to the knife.

Arguments and facts are very numerous which negative volition entirely, and affirm the supposition of reflex action as the proximate cause of malposition and shortening of the member. I shall enumerate but few of them.

1. The coëxistence of perfect *painlessness* in the affected hip-joint with the whole train of collateral symptoms constituting malposition of pelvis and leg. Why deformity, if volition is not proved to "defend the patient against pain?"

2. Coëxistence of pain in the hip-joint, with perfect absence of deformity. There is provocation; but volition does not choose to interfere in the symmetry of the frame.

3. Variety of positions of the affected extremity: straight, with outward rotation; bent-in hip and knee-joint, with inversion and inward rotation; bent-in hip and knee-joint, without inversion or eversion or rotation to either side, the knee approximating almost to the chin.

It cannot be conceived why volition should employ different means to obtain the same effect.

4. Inexpansibility and rigidity of the muscles during sleep and under the influence of anæsthetics. The will is dormant or suspended; the muscular retraction is still the same.

5. The patient feels almost instantaneous relief from his severe pain, if his leg is brought, by the assistance of chloroform, in a straight position, and retained there by mechanical contrivances. It follows, that the straight position is comparatively more advantageous, comfortable, and painless than the flexed and inverted condition of the affected extremity. Now, it cannot well be asserted, that the patient himself would consciously employ his muscular powers to aggravate his sufferings; it may be, therefore, concluded, that the morbid influence, prompting the muscles to contract, is anything but the will of the patient.

6. Bonnet, Buehring, Lorinser, Malgaigne, myself, and others, have succeeded in curing deformities of *recent* and *long* standing, originating from hip-disease, by the use of proper placement and extension. The daughter of Dr. McV., of Chicago, is just about to leave the Orthopædic Institution, in which she has been under treatment during the last four months. Her left leg was slightly anchylosed and immovable in the hip-joint, besides being $1\frac{3}{4}$ inches shorter than the other; the pelvis was also drawn up. She has regained the use and the natural length of the member.

Now, it is evident, that gradual extension would materially add, neither

to the length of the bones, nor alter their relative position to each other; nor would the physical properties of the ligaments allow any considerable elongation. But contracted muscles yield to a greater or less extent, in proportion with the advance of muscular degeneration into fibrous or fatty tissue.

7. The considerable emaciation of the affected leg appears to share with the muscular retraction the very same source of morbid innervation. At least, I cannot account for it by the discharge of matter, for many cases are devoid of it, nor by the want of exercise, which has no analogous facts; whereas, we find the same reduction of the circumference of the limbs in club-foot and club-hand, where morbid innervation is indisputable.

Even the characteristic pain in the knee stands in close relation to the muscular retraction. I have seen it returning as soon as the extension commenced, the disease having terminated five and ten years previously.

8. The pathology of other joints furnishes the same facts in reference to muscular retraction. Inflammation of the cervical vertebræ, and their articular apparatus, produces simple or double caput obstipum; affection of the dorsal and lumbar portions of the spine causes secondary retraction and shortening of the psoas muscles, with proportionate inflexion of the hip; inflammatory processes of knee and hip-joints are commonly accompanied by contraction of the flexor muscles, oftentimes, especially at the knee-joint, leading to subluxations in inflammations of finger-joints, or even in simple panaritium, we observe, and not rarely, a shortening of the corresponding flexor muscle.

All those collateral symptoms of reflex action are, of course, liable to modifications of every description, and according to the originating circumstances, as every injury of tendinous tissue does not always create tetanus.

If the talented reviewer would give his attention to Bonnet's book on Disease of the Joints, and to Brother Webers' on the Mechanism of the Locomotive Organs, and compare the results of their experiments in reference to the relative capacity of the articular cavities, the degree of tension and relaxation of their capsular and auxiliary ligament, in the various positions of the extremities, he would at once acknowledge his error in having, for one moment, taken the usual position of the leg, in hip-joint disease, as that of rest and relief, independent of the deformity itself, while the straight one should be preferred, both physiologically and pathologically considered. Miller's Principles of Surgery, if I am not mistaken, inculcate the same opinions.

The peculiarity of the position the affected member is prompted to assume, depends, indeed, not on the imaginary benefit the patient may be supposed to receive from it, but on both the preponderance of power of the flexor, adductor, and rotator muscles (conf. Fisk's Statistic Observations on

the Musculature of the Thigh, Henle and Pfeuffer's *Zeitschrift*, 1850), and excited innervation. And Borelli's denial that the motor power of a muscle, standing in the same ratio as the length of its fibres, dispenses with the obligation to call the reviewer's attention to the impropriety of comparing the relative powers of the pyriformis, gemelli, quadratus femoris, with much thicker, longer, and, under more advantageous leverage, inserted flexor and adductor muscles of the thigh.

The muscles principally involved in the distortion collateral to hip-joint disease, vary according to the deformity itself. In simple flexion of the thigh, the rectus femoris, tensor fasciæ latæ, gracilis, semi-membranosus, semi-tendinosus, and sartorius, are the principal actors; in flexion, inversion and inward rotation, the rotator, adductor muscles, iliacus internus, and psoas major are contracted.

The latter, in substantial shortening, approximates its attachment and insertion, spine and small trochanter; the patient, when recumbent, leans either his spine towards the affected side, for the sake of relaxing the muscle, or, when in erect position, raises the leg, and by that very means the pelvis, on the affected side. The coëxisting twisting of the pelvis, on its transverse and its longitudinal axis, seems to be a simple effect of the mechanical condition under which the contracture of the psoas muscle is placed. That this is no speculation, but a fact removed beyond further doubts, I had the opportunity of ascertaining in various cases, in which I removed, instantaneously, the said deformity—malposition of the pelvis included—by dividing the psoas muscle at its attachment, in corpses having died of the effects of hip-joint disease.

I need not reiterate that the reform before the operation was not possible. There is little doubt that, in desperate cases, tenotomy will prove just as effectual in the living body, and I shall perform it as soon as an appropriate opportunity offers itself. The third position of the affected leg (straight, slightly inverted, and rotated outwardly) depends, in my estimation, on effusion within the capsular ligament, the latter not yet being ruptured.

This is exactly that position which, according to Bonnet's and Guerin's experiments, the leg assumes when artificial injection has been made into the articular cavity. And I have never failed to find effusion when opening it by trocar or incision.

As indefensible as the arguments of the reviewer have proved to be in opposition with the well-matured views of the renowned author,—just as vague and superficial are his objections in reference to the therapeutic part of Dr. Alden March's paper.

Is there no further doubt that undue muscular action is the proximate cause of the deformities in question? is it, furthermore, admitted that the

muscles yield to extension as long as they are entire, and not degenerated! what is more natural and reasonable than to apply splints, or other mechanical contrivances, in seasonable time to prevent, if possible, and to remove deformity? The earlier this can be done, the more effectual it will prove. The reviewer does, however, not conceive its advantages. Well, he is perhaps young, and desires information. I will give it him. If a man suffers from spastic contraction, he needs but to extend the muscle by putting its antagonists into operation, and the cramp subsides immediately; the same method has been followed with success in the treatment of the spastic affection in Asiatic cholera; extension has been found effectual in the treatment of muscular contractions of others, especially of knee and elbow-joints, why not apply it against the same affection of the hip-joint.

True, extension does not cure morbus coxarius, nor is it intended or represented to do so; other remedies are likewise to be put in coöperation, but it counteracts muscular retraction, prevents or removes the consecutive distortion, keeps parts of the joint in a desirable mechanical relation, and secures repose against accidental and undue movement. It may as well be added that it prevents the degeneration of the muscles concerned. The temporary disturbance of the patient does not bear any comparison with the material benefits to be derived from such treatment, which, though it does not cure hip-disease, removes at least one of the most aggravating collateral symptoms. Splints, moreover, do not prevent the patient from the enjoyment of fresh air, as the reviewer so much dreads. Is the disease more advanced,—stronger apparatus becomes requisite; and, in extreme cases, the knife will effectually settle the question in reference to such deformities.

The critic is highly displeased with Dr. Alden March, that he has ventured to bring his local treatment before the profession, on account of its being neither novel nor effectual; but what shall I say about the reviewer, who re-digests the whole therapeutic apparatus of the 18th century, the suggestions of Ford, which sound surgeons in England, France, and Germany have long since given up as useless, cruel, and irrational,—from which John Bell states, the patient "often dies from fever and irritations, great profusion of matter, and caries of the bone. If he survives, it is usually with a limb emaciated, crooked, hanging in air, and fixed by anchylosis of the femur with the haunchbone."

Surely, such a result is neither satisfactory to any proper and high-minded surgeon, nor to the patient. I, for my part, have seen too much of the dreadful consequences of derivation with moxa and ferrum candens, Rust's panacea, to return to it, and therefore most respectfully decline to do so.

In conclusion, we cannot refrain from stating that the review of Dr. Alden March's paper, fabricated by a "great anonymous," has entirely failed

to impress us either with the justice of his remarks, or with the logical soundness of his arguments. We cannot sanction the claim of the critic for competency on this important subject, nor is his mode of treatment commendable to either practitioners or students.

Being a foreigner, and by no means sufficiently familiar with the English language to rival the critic in the expression of my views, I concede to him superiority of diction, but feel warranted in claiming the superiority and soundness of opinions entertained by me in reference to the subjects in controversy. But *sapienti sat.*

LOUIS BAUER, M. D.,
Brooklyn Orthopædic Institution.

Feb. 12th, 1854.

PART II.—REVIEWS AND BIBLIOGRAPHY.

The Transactions of the American Medical Association. Instituted 1847. Vol. VI. Philadelphia, 1853; pp. 866.

[Continued from p. 133.]

The Report on the results of surgical operations in malignant diseases, by Dr. Gross, of Louisville (except the portions furnished by Dr. Warren, of Boston, and Dr. Hamilton, of Buffalo), extends through 158 pages of the Transactions. It is an elaborate compilation of the opinions of the highest authorities, American, English, and Continental, up to the present time; and is divided into three parts.

I. The first part contains general observations on the nature, objects, and difficulties of the inquiry; on the origin of malignant diseases—their hereditary nature—their latency—circumstances contra-indicating surgical interference—their tendency to reproduction after extirpation—general rules for their excision, and for their subsequent treatment.

We fully endorse the forcible remarks of Dr. Gross in regard to the reliance upon foreign authorities to the neglect of our own writers and teachers, which is but too common among American medical men. The necessity heretofore existing, of getting any American improvement in medicine or surgery endorsed by some learned society abroad, which results from this miserable tendency, has been alluded to in our first number, and we take pleasure in quoting his language.

"American physicians and surgeons seem to glory in being the slaves of European authority, in whatever pertains to their profession, both in matters of opinion and practice. Like Esau, they have bartered away their birthright for a mess of pottage; they are unwilling to learn anything that is purely American; they are too proud to acknowledge that anything good can emanate from a native author, and too stubborn to admit that one man knows more than another. They would rather at any time—lest they should seem to be indebted to their own countrymen—quote Louis and Chomel than Drake and Chapman, or Cooper and Brodie than Gibson and Mott."

Dr. Gross does not, of course, tarry to specify the causes of the miserable state of things in this respect. We shall return to this subject in a future number, merely remarking here that so long as the system, so prevalent in some quarters, continues, of seizing an English medical book as soon as it leaves the press, and "editing" it, as it is called, in this country, and thus very cheaply riding on to fame upon another author's back—so long, few competent American writers will find encouragement to write original works, and foreigners will still continue to write even our text-books for us.

Remarking upon the different malignant diseases, Dr. Gross states, "with all possible deliberation, that tubercular disease of certain organs—as, for example, of the lungs—is as malignant, as unforgiving, as any form of cancer of which we have any knowledge, or of which we can in truth form any conception." We must enter our *caveat* against the general adoption of this idea. Many a patient (though but a very small proportion of all affected) has expectorated tubercles from his lungs, and afterwards remained for years entirely free from any sign of pulmonary or any other disease.

In this Report, Dr. Gross divides malignant diseases into two classes: 1, *Cancer*, of three forms—schirrus [fibrous], encephaloid, and colloid; and 2, Melanosis. *Cancroid* affections [*epithelial* cancer] are semi-malignant, and most frequently attack the face [lupus, and noli-me-tangere] lip, tongue, penis, scrotum, and cervix uteri. True cancer may, however, also attack the parts just mentioned.

The three forms of true cancer are distinguished by the "cancer *cells*, and the cancer *juice*," neither of which is found in the cancroid affections.

We do not ourselves admit *a cancer cell*, which will distinguish cancer from all other morbid epigeneses; but if, in the same specimen, several or all of the *different* cells found in cancer be met with, it may be very safely pronounced a cancerous growth. Many a mistake in diagnosis has resulted from a belief in the *cancer cell*. Those who would know all the facts in regard to this subject, may consult Vogel's Pathological Anatomy, or Gluge's Pathological Histology, translated by Dr. Leidy.

The circumstances contra-indicating surgical interference in malignant diseases, are:

1. When it is congenital, or manifested soon after birth.
2. When existing in several parts of the body at the same time.
3. When it has made great and rapid progress, or broken through its original confines and invaded the adjacent tissues.
4. When there is a quickened state of the circulation, from the local irritation.
5. When there is serious disease of an important internal organ.
6. The sanguine temperament, or the hysterical condition, may contra-indicate operative procedures; as may corpulence also, in case of cancer of the mammary gland.

The principal rules for the removal of malignant growths, are:

1. Remove every particle of the disease, by cutting through the healthy, at some distance from the diseased, tissues.
2. Remove the whole of an organ, though only a small part be affected. [This rule can, of course, be *rigidly* applied only in the case of glands.]
3. Preserve as much of the integuments as possible, in order, if possible, to cover the wound.
4. Prevent, so far as may be, the loss of blood.
5. Heal the wound, if possible, by the first intention.

II. The second part is an elaborate *resumé* of the opinions of American and foreign surgeons, on the general subject of excisions of malignant growths. It commences with a very valuable paper from Dr. J. M. Warren, of Boston, comprising a history of twenty cases of cancer in different parts of the body; a summary of the operations for cancer at the Mass. General Hospital, from 1822 to 1852; and a record of 76 operations for cancer in Dr. W.'s own private and hospital practice. Then follows a table, evidently drawn up with much care, by Prof. Hamilton, of Buffalo, including the particulars of 59 cases of operation for cancer by himself.

This part concludes with the opinions, respecting the propriety of surgical operation in malignant diseases, of Drs. Eve, of Georgia; Norris, of Philadelphia; Pope, of St. Louis; Hamilton, of Buffalo; and the late Dr. McClellan, of Philadelphia, with a few cases by Drs. Warren, of Boston; Palmer, of Louisville; and Mussey, of Cincinnati. The most prominent European authorities are also next quoted. The results arrived at, will be found at the close of this analysis.

III. The third part contains a *resumé* of the results of operations for *cancer* in the different parts of the body, viz.: cancer of the mamma, of the

eye, the gums and jaws, the lips, the penis, the testis, the uterus, the anus and rectum, and of the bones.

The views on extirpation of cancer of the breast are given, of Hippocrates, Celsus, and other ancient authors; of Dorsey, Gibson, Physic, Parrish, Rodgers, Dudley, Twitchell, Atlee, Parsons, Knight, Mussey, Eve, Green, and Flint, of our own country; and of the most distinguished surgeons of Great Britain, France, Germany, Holland, Denmark, and Italy. The great success claimed by Hill, Flajani, and others, of this operation as performed by them, Dr. Gross thinks must be received with much allowance. He himself records an interference in a case of cancer of the penis. We have ourselves operated, as a matter of course, when the cancerous deposit is so situated as to produce a gradual closure of the urethra. He manifests the same want of reliance upon Lisfranc's results of excision of the os in cases of cancer uteri; with which all will doubtless accord.

But we finally state the conclusions arrived at. We have somewhat condensed the phraseology of Dr. Gross, but believe we retain its substance.

1. Cancerous affections, particularly of the mammary gland, have always, with a few rare exceptions, been regarded as incurable by the knife and escharotics. Nor does nature, nor any known internal remedy, cure a disease of this kind.

2. Excision, however early and thoroughly executed, is nearly always, in genuine cancer, followed by a relapse, within from a few weeks to several months after the excision.

3. Almost all practitioners, since Hippocrates, are averse to operative procedures after rapid growth, great bulk, ulceration, firm adhesion, organic change in the skin, lymphatic invasion, the cancerous dyscrasy, or serious constitutional derangement.

4. Operations are followed by more certain and rapid relapse in case of encephaloid than of schirrus [fibrous cancer].

5. Almost all the reports hitherto made of operations in cancerous affections are deficient in their details; and thus not contributing to a complete and thorough understanding of this subject.

6. Cancroid affections of the lip and skin [epithelial cancer] are less liable to relapse after extirpation than genuine cancer.

7. Still, a great majority of practitioners have always been in favor of operation in true cancer, especially in schirrus, before the tumor has made much progress, and before there is any evidence of disease of the lymphatic glands, or of the cancerous cachexy.

8. Many tumors, especially of the breast and testicle, which have been removed as cancerous, were, in reality, not so; and thus we may account for the astonishing success of Hill, of Scotland; North, of England; and Flajani, of Italy.

9. All operators insist on the five rules specified on page 3 of this analysis.

10. Much stress is laid by writers upon a well-regulated diet, and attention to the bowels and secretions generally, after extirpation, as a means of retarding or preventing a relapse. But no remedy or treatment known, has the power to prevent the reproduction of the morbid action after operations, however early or thoroughly the latter may be performed.

11. Life has occasionally been prolonged, or even saved, by operation after relapse; but, generally, a second is as incompetent to effect a permanent cure as a first extirpation.

On the following points, opinion is much divided, and further observation is necessary to decide either affirmatively or negatively.

1. Excision is of doubtful propriety in all cases in which the disease is of hereditary origin, or where it occurs in members of the same family. It is, also, in young patients, where the disease is of rapid growth.

2. It is doubtful whether an operation should be performed when the disease is attended by suppression of the menses, or by great irregularity of the discharge; or when there is a quickened state of the pulse, occasioned by the local irritation.

3. It is doubtful whether extirpation is proper when there are two or more coëxistent and accessible cancerous tumors.

4. It is supposed, but the fact is not established, that excision of carcinomatous tumors only tends to hasten the patient's death.

5. It is doubtful whether, all else being equal, the prospect of a permanent cure is greater after an operation on an old cancer, than on one of recent development.

6. The assertion demands verification, that the re-appearance of cancerous disease, after operation, is more rapid in robust women of sanguine temperament, than in nervous or lymphatic persons.

7. It requires to be proved, whether excision ought to be performed in the ulcerated stage of malignant disease, as a means of prolonging life, and procuring comparative relief from suffering.

Dr. Gross finally expresses his own convictions on the subject thus:—

"I have little, indeed, I might say no confidence, in any operation for malignant diseases, except the *cancroid* variety; and I have, for years past, deemed it my duty, as Professor of Surgery in the University of Louisville, to discourage a resort to the knife in all cases of the kind, especially in schirrus and encephaloid of the mammary glands; ample experience having satisfied me of the utter futility of such an expedient, however early and efficiently employed. In cutaneous cancer, on the other hand, my rule has always been to operate, provided the disorder has not advanced so far as to preclude the possibility of removing the whole of the morbid growth; and provided, also, that there is no evidence of constitutional infection."

We shall be excused for the length of this analysis, since it includes all the principles which may be regarded as yet established, in respect to the surgeon's dutyin operations for the removal of malignant epigeneses. And while we disagree with Dr. Gross as to the "utter futility" of such operations, in *all* cases whatever, of true cancer, we cheerfully accord to him the merit of having exhausted the subject in the present state of our science, and thus having established a new stand-point and foundation for future investigations.

"*On Acute and Chronic Diseases of the Neck of the Uterus.* By CHARLES D. MEIGS, of Philadelphia."

WE give the literal title of this paper as it appears in the Transactions of the American Medical Association. The second sentence of the Report is as follows: "The Committee have not understood that they are commanded to present a complete summary of whatever has, of late years, been proposed by numerous writers upon this topic; and have, therefore, prepared such a report as they venture to hope may, to some, prove as a help to clinical practice in an important and extensive department of medical and surgical treatment." We propose, then, to examine the report with reference to its value as an aid to "clinical practice." We shall not stop to consider the question, whether the "Committee"—viz., Prof. Meigs—has rightly understood his duties, or whether it was the intention of the American Medical Association to get at the peculiar views of Dr. Meigs on this important subject.

The report first discusses the morality of physical exploration in uterine disease. In this part of the paper, the use of the offensive word "speculum" is adroitly avoided, "metroscope" being substituted. It is very gratifying to learn that "the Committee do not find themselves called upon to discountenance and reprobate the prudent and necessary employment of the modern methods and instruments intended to improve the means of diagnosis and surgical treatment of diseases of the cervix uteri, conceiving that this is a matter to be left to the conscience and judgment of their brethren, whenever the occasion may require." But the main argument on this point, is found in a subsequent part of the paper, in the following words: "The most essential element of a successful practice exists in a positive diagnosis. It will not do for us to believe, or suspect, or infer, this or that—we must guard the interests of the patient, by knowing it is this, or that, or the other form and stage of a disease."

The report next gives some hints and directions in regard to physical exploration and diagnosis of uterine disease. This is illustrated by three engravings.

Those familiar with the treatment of uterine disease will agree with Dr. Meigs, that "experience has shown that many instances of bad health in women are to be attributed to acute or chronic ailments of the womb, where no topical pain or other sign of local lesion is complained of. Thus some of the examples of perverted innervation exhibited in torpor of the bowels, chronic tympanitis, frequent attacks of spasm and general convulsion; cephalalgia, palpitation of the heart, pain in the back, loins, and lower extremities; fluor albus and aggravated hydæmia, take their origin from disease of the cervix uteri." Nearly all will agree with him also, that leucorrhea, when at all serious, is a symptom of inflammatory disease of the cervix, and that "a vaginal injection for inflammation of the canal of the neck, is simply ridiculous." He properly insists upon the importance of an accurate diagnosis of the pathological condition on which this symptom depends.

"Where the touch gives sufficient information, let the touch suffice; but if any doubts as to the wants of the case remain, then a metroscopic examination should be made."

In illustration of this part of the subject, Dr. Meigs gives three colored engravings (plates 5, 6, 7), and a sketchy description of the cases from which the illustrations were drawn. There is nothing novel or peculiar either in the character of the cases, or the mode of treatment adopted for their cure. At an earlier period in the history of uterine pathology, these cases and illustrations might have been of some value, but it is to be supposed that every well-educated member of the profession, and certainly every member of this Association has, at this day, some slight knowledge of the writings of Bennet, Simpson, Whitehead, Churchill, Kennedy, &c., to say nothing of the eminent French and Continental writers on this subject. To be sure, the description of the appearance of the cervix, in cases of troublesome leucorrhea, is somewhat original. "One or both lips of the womb will be found tumid, softened, granulated, or botryoidal in appearance, and of a uniform red; or else drusy as to the surface," &c. Do these words, "botryoidal" and "drusy," mean anything in this connection? Inflammation can never make the cervix "*botryoidal*," nor can the mucous membrane ever be said, even by a forced analogy, to present a "drusy" appearance. Prof. M. evidently plumes himself on a new point, which he makes in the treatment of these inflammations, viz.: the "antiphlogistic contacts" of the nitrate of silver. We give his own words, without comment, that our readers may judge for themselves: "It is undeniable, that a pencil of nitrate of silver, applied to a soft, moist, living tissue, and held long in contact with it, will disorganize the tissue, and so prove to be a destructive contact. It is equally undeniable that a contact may be effected with such rapidity and lightness as to prove ineffectual or indifferent, while there is another mode or force which does resolve inflammation with great certainty;

and this is the antiphlogistic contact spoken of above. We therefore feel warranted to speak of such use of the nitrate of silver as being either destructive, or indifferent, or antiphlogistic contacts; and experience confirms the propriety of the classification; for we meet with numerous examples of treatment that conclusively prove it is not the mere treatment by escharotics that is so successful, but the use of them in such a way as to provide for their due operation as antiphlogistics, and not as destructives."

Several pages of the report are devoted to the consideration of retroversion of the uterus. We are met at the outset with the astounding statement that "Reporter has long been fully convinced that retroversion of the womb constitutes seventy-five per cent. of all cases of sexual disorders of a gravity sufficient to require appeal to medical advice." As we learn from another paragraph in this paper, that the Reporter has had "an immense experience in a populous metropolis,—an experience greatly increased by the resort of numerous invalids from the country, and from the different United States," we are compelled to believe that the reporter must have met with an epidemic of retroversio uteri. We are certain that in this suburb of Philadelphia, retroversion of the womb does not constitute ten per cent. of "the cases of sexual disorder of a gravity sufficient to require appeal to medical advice." Dr. Meigs devotes several pages to the consideration of this subject, his object being mainly to illustrate the tendency of the retroverted uterus to hypertrophic development and inflammatory disease of the cervix. That these pathological conditions are frequently associated with this displacement, is admitted by all. The following extract from the excellent Dissertation on Displacements of the Nongravid Uterus, by Dr. Peebles, of Petersburg, Virginia, presents this point much more clearly than all Dr. Meigs says, with his detail of cases and colored engravings. "The malposed uterus, in both forms of its version, presents great uniformity in its condition. I believe that all writers are agreed that it has associated with it a structural change, to which the term engorgement is applied. I have never seen it absent. This engorgement may present itself in varying degrees of intensity. I shall describe it in the two extreme states in which it may be found, leaving the reader to infer that it may exist in every conceivable grade between them. It may be partial, or it may be general, involving the whole organ. In the former case, it is always seated in the dependent surface of the organ; that is on the posterior wall in retroversion, the anterior in anteversion. To the touch it presents a slightly raised and generally smooth, though often irregular, and sometimes lobulated surface, which is denser than the natural structure of the part, and may be exquisitely sensitive. I have often felt it in retroversion, occupying a spot on the posterior wall of the uterus, not larger than an almond, with well-defined edges, where it joined the healthy structures. In such cases, the remaining portion of

the organ, including the cervix, may be perfectly healthy and natural. Generally, however, the whole pendent surface of the uterus is involved. * * Engorgement, resulting in hypertrophy, is, then, the pathological state of the retroverted nongravid uterus. It is, in a large majority of cases, the only morbid state found to exist in the organ, when its malposition does not depend upon extraneous causes, such as tumors within the walls of the organ, and similar morbid states of its environs."

We are by no means certain that this pathological condition is not more frequently the cause, rather than the consequence, of the malposition. We have certainly, in some cases, succeeded in curing the engorgement and inflammation, with a total subsidence of uterine symptoms, when we have not been able to cure the retroversion.

In those cases where the retroverted organ is not movable by the hand, Prof. M. effects reposition by means of caoutchouc bottles, filled with curled hair, a method proposed by M. Hervez de Chegoin. In another part of the paper he says, "In more than one remarkable case we have found the fundus fastened down in its unnatural bed, in the pelvis, by means of strong adhesions, which it was necessary to divide with the scalpel before we could reduce the uterus to its proper position again!!" For the radical cure of this displacement, he makes use of an annular pessary, made from watch-spring, coated with gutta percha dissolved in chloroform. We take it, our readers are familiar with the method proposed by Prof. Simpson, and the modifications of his plan proposed by M. Valleix. Of the comparative value of these modes of treatment, we must leave them to judge. We will only say that we are convinced that there are some cases which can neither be cured by the stem pessary of Prof. Simpson, or the "*redresser*" of M. Valleix, or the annular pessary of Prof. Meigs, or the barred pessary of Prof. Hodge, so strongly recommended in the valuable Dissertation of Dr. Peeble's, to which we have before alluded. In a future number of this Journal we propose to discuss the treatment of retroversion much more fully.

We shall not stop to examine that part of the report devoted to vivaces, polypi, and other morbid growths which excite uterine hæmorrhage in the inter-mensual periods, as we find nothing which has not before been well known to the profession.

The following case is interesting and uncommon. "The patient was a very robust and stout, married woman, aged about thirty years, less or more. She had children. Complaining of frequent attacks of irregular menstrua, she appealed for advice to a physician, who, giving an unfavorable prognosis, so excited her fears and the anxiety of her family, that Reporter was invited to form an opinion on the case. The vagina contained a substance of the size and shape of the red mass which in Plate 18 is seen springing from the anterior aspect of the vaginal cervix. To the touch, it communi-

cated the impression always produced by touching the tissues in schirrus or carcinoma uteri. It had the same resistance and roughness, or grater-like feel that belong to cancer of the womb or vagina. The gentlest touch caused it to bleed. It was not sensitive, so as to be intolerant of pressure. The posterior aspect of the cervix gave by the touch the idea of normal tissue, and this was likewise the case as to the lips of the os tincæ; and, indeed, all the accessible parts of the womb seemed to be perfectly sound and healthy, save only where the peduncle or root of the malignant mass arose from the anterior aspect of the neck. The vagina was everywhere quite healthy." The mass was removed by ligature, and the base was destroyed by acid nitrate of mercury. Every vestige of diseased structure was removed, and the lady has enjoyed good health for three years.

In concluding our notice of this paper, we must frankly confess that it has greatly disappointed our expectation. Prof. Meigs is well known to be an eminent teacher in the largest school in the United States, and a most successful practitioner. This report is unworthy of his distinguished reputation, and unworthy of the expensive publication which it has received from the American Medical Association. In fact, it is no report at all. We think Dr. M. entirely misconceived the duties assigned to him. The Association surely had a right to expect a careful and complete resumé of what is known in regard to this interesting and important class of diseases. It certainly savors of presumption on his part, to suppose that they would have incurred all this expense merely to get at some of his clinical experience. And then as to its value as a "help to clinical practice," we must say, that those familiar with the subject will learn nothing that has not before been presented in a clearer light; and we fear that those who are not familiar with the subject will learn little by the perusal of this paper, in regard to the pathology, diagnosis, and treatment of "Acute and Chronic Diseases of the Neck of the Uterus." Had Prof. Meigs been a young man, striving to obtain an honorable position, we should have ignored this paper; but knowing that he could have done better, we have felt that our duty to the American Medical Association, and our duty to the profession at large, compelled us to express our honest convictions.

(To be continued.)

Functional and Sympathetic Affections of the Heart. By JOHN W. CORSON, M. D.

WE have received from the author a pamphlet of thirty-one pages, with the above title; the same being a paper read before the Society of Statistical Medicine, and also published in the last (Jan., 1854) number of the New York Journal of Medicine.

Dr. Corson has enjoyed rare opportunities for investigating this class of

diseases, both while physician to the Brooklyn City Hospital, and, since, as one of the physicians to the New York Dispensary; and this is a very valuable contribution to this very important subject.

We became impressed, some years since, with the great mischief resulting to patients, from their medical advisers mistaking functional for organic diseases of the heart—both as a consequence of injudicious medication, and of the intense anxiety unnecessarily produced. We have also long held and taught, that much the greater number of all the cases of heart affection brought to the notice of physicians, belong to the class considered by Dr. C. Of twelve patients who consulted us within as many weeks, in the spring of 1850, each having been under the care of some physician at a distance from us, and all having been assured that they had disease of the heart, and that they might die at any moment therefrom—*only two* had any organic affection, as both the diagnosis at the time and the subsequent effects of the treatment advised, enabled us to decide. And, in view of the intense mental suffering unnecessarily inflicted upon those who have been thus deceived, we fully adopt Dr. Corson's proposition, viz.:

"In all doubtful cases, it is always best to defer giving an *unfavorable* opinion, till we have made repeated examinations, after exercise and quiet, and until after the test of treatment."

Dr. C. very truly remarks, that many of the marked symptoms of organic disease of the heart have their close functional imitations—as violent palpitations, unnatural impulse, bellows murmur, intermittent pulse, præcordial pain, fainting with difficult breathing, or even swelling of the feet. The following table, however, very clearly contrasts the variations of several of the prominent symptoms in these two classes of cardiac affections (p. 10).

In Functional Affections.	In Organic Heart Disease.
Præcordial dulness on percussion is not permanently *extended*, nor the *apex displaced*.	*Præcordial dulness* in enlargement is permanently *extended*, and the *apex crowded to the left*.
The *impulse* in *plethora*, is strong *bounding*; in *irritation*, smart *knocking*; in both, wildly jarring; in *debility*, small, soft *tapping*, sometimes *hurried*.	The *impulse* in *hypertrophy*, is strong, broad *heaving*; in *dilatation*, weak, wide *flapping*; in both together, strong, large *bulging*; in all, with *extended dulness*.
The whole *movement* of the heart is more *elastic*, *light* and *easy*.	The whole *movement* of the heart is more *dead*, *clumsy*, or *labored*.
Functional murmurs are *soft blowing*, *aortic* and *systolic*; are from *anæmia*, and usually with venous hum in the neck.	*Organic murmurs* are *harsher*, *louder*, often *grating*, *aortic* or *mitral*, *systolic* or *diastolic*, or both, and very rarely with *anæmia* or venous hum.
Functional is more *paroxysmal*.	Organic is more *uniform*.
Active exercise is often well borne, and benefits.	Active exercise always *aggravates*.
The *causes* are mainly *dyspepsia*, *anæmia*, *plethora*, *nervous*, or *generative* [genital] disease.	The most common *causes* are, first, *rheumatism*; next, *Bright's disease*.

The causes enumerated of functional affections of the heart, are the *sanguineous, muscular, nervous, mental, digestive, generative, and irritative or poisonous.* The three morbid conditions—of which one usually predominates—in such cases, are, congestion, irritation, or debility.

Congestion may be due to plethora, over-exertion, revulsion, or emotion.

Irritation and *debility* may both be nervous, hysterical, anæmic, dyspeptic, uterine, or spermatorrhœal; and the former may also be mental. The action of all these causes, both of irritation and of debility, as well as of congestion, is illustrated by cases. We have ourselves prescribed for a case, within the last month, of violent palpitations, with a sensation of a living animal moving in the stomach, an intermittent pulse, and a dry, hacking cough; all of which symptoms, after continuing several weeks, were at once removed by copious enemata, which removed a large mass of hardened scybalæ. This was the only treatment adopted, and there has been no return of the symptoms.

The whole paper evinces much discrimination, and accurate study of the diseases under consideration; and very few, comparatively, can appreciate the amount of labor and observation on which their classification, as above, is based. We hope to see the author's views still farther expanded and illustrated in a volume ere long to be published by him.

In regard to the *treatment* of this class of diseases by Dr. Corson, we can merely allude to the use of nux vomica, or its alkaloid, by him, in cases of *debility* of the heart, as a beautiful deduction from Dr. Marshall Hall's experiment of rousing the nervous system of the frog when stunned by the division of the spinal chord, by applying the acetate of strychnia; together with the results obtained by Prof. E. Weber, who, by the same application, produced *tonic contractions* in the palpitating heart of the frog after it had been removed from the body. Dr. C. gives five drops of the strong tincture of the nux, three times a day, gradually increasing, if required, to 15 drops; or the same quantity of a solution of one grain of strychnia in ʒ vi. water and ʒ ii. of acetic acid. ℔℔℔

PART III.—CHRONICLE OF MEDICAL PROGRESS.

[The abstracts and translations found under this title are made expressly for the AMERICAN MEDICAL MONTHLY.]

ANATOMY, PHYSIOLOGY, AND GENERAL PATHOLOGY.

On the Phrenic Nerve in Man.—By Prof. LUSCHKA, of Tubingen. The following are some of the principal conclusions embodied in a recent monograph upon this subject.

The phrenic (diaphragmatic) nerve *originates* always principally from the fourth cervical nerve; and entirely from it in most cases. In some cases, it rises from both the fourth and the third nerves. Hence, lesions of the spinal cord, in the region of the fourth nerve, sometimes completely impair the motions of the diaphragm, and in other cases, do not—certain filaments also entering it from the third nerve. Frequently we find these two different origins on the two sides of the same subject.

This nerve is both motor and sensory, like all the cervical nerves. Some of its branches, moreover, as that going to the substance of the liver, contain fibres of the great sympathetic.

The phrenic nerves communicate,—1st, freely with each other, by a free interchange of fibres; 2d, variously, with the great sympathetic; 3d, only at times, with the hypoglossal, and then, since only certain fibres of the ramus descendens hypoglossi unite with the phrenic, and these same originally entered the descendens from the *third* cervical nerve—these are shown to be really fibres of origin of the phrenic itself.

With the pneumogastric, the phrenic is *never* connected at all.

It must be also remarked, to show the importance of Prof. Luschka's investigations in semeiology, that the fourth cervical nerve giving off usually the whole, and always most of the phrenic, also sends off large branches to the shoulder and external clavicular region; and that the third cervical nerve, sometimes affording a part of the phrenic, also gives fibres for the superficialis colli, and to the risorius Santorini muscle, and also fibres communicating between the superficialis and the facial nerve. The sardonic laugh, occurring in injuries and inflammations of the diaphragm, is an instance of reflex (diastaltic) action, to be explained by a reference to the connections just pointed out.

[In other words, the trunk of the third cervical nerve (sometimes) gives off a part of the phrenic to the diaphragm (through the descendens hypoglossi, as just explained); and also gives fibres through the superficialis colli to the risorius Santorini, and indirectly, also, through the branches of the facial nerve. And the fact of irritation in one of these subdivisions in the diaphragm producing contractions in muscles supplied by the other, is an instance of mere diastaltic action. If, however, *pain* is produced in a distant part, instead of contractions—viz., pain of the shoulder in case of inflammation of the liver—this phenomenon is parallel to that of neuralgia in the first or second branch of the fifth pair of nerves, caused by a carious tooth in the lower jaw—i. e., by irritation of the third branch of that nerve.

We have just seen that the fourth cervical nerve-trunk sends fibres to the shoulder, and external clavicular region; it also sends fibres to the liver, through the phrenic, as will next appear.—E. R. P.]

The *branches* of the phrenic are: 1, those interchanging between the two phrenics; 2, those distributed to the diaphragm; 3, to the costal and diaphragmatic pleura; 4, to the pericasdium; 5, to the liver and its serous envelope; 6, to the mediastinum; 7, to the peritoneum lining the diaphragm, and the abdominal muscles down to the umbilicus; 8, to the inferior vena cava.

The costal pleura, diaphragmatic pleura, and mediastina, and the substance of the liver, receive branches from the sympathetic as well as the phrenic. The pulmonary pleura is supplied solely by the pneumogastric, and the pericardium from all these three sources just mentioned. The hepatic peritoneum is supplied solely by the phrenic, as is also the diaphragmatic, and that lining the abdominal parietes to the umbilicus.

The following are some of the semeiological applications of the preceding facts:

a. The sardonic laugh is a symptom of inflammation of the diaphragm. The channels of this diastaltic act have been already explained. The similar, but less pronounced expression, in peritonitis (especially when chronic) is explained in the same way.

b. Paroxysmal vomiting is common in inflammation of the diaphragmatic peritoneum, or the diaphragm itself. This reflex action, also, like the sardonic laugh, has the branches No. 3 of the phrenic as its incident or esodic nerves.

c. 1. Pain in the right shoulder and clavicular region (or in both shoulders) is a symptom of inflammation of the liver, and especially of its serous envelope. 2. Pain of the left shoulder, often extending to the elbow, may occur in pericarditis. 3. Pain in the shoulder is also common in pleuritis, on the side inflamed. The 1st case is explained by reference to the fourth preceding paragraph, and to the branches No. 1 in the third paragraph preceding; the 2d case, by reference to branches No. 4; and the 3d, to branches No. 3. [If, however, the pulmonary pleura alone is affected, we should not expect to find the pain above-mentioned present as a symptom. The pain referred to the side in pleuritis is probably in the phrenic alone; but mere *pleurodynia* may be either in the intercostals or in the phrenic; and hence, derangement of the liver may produce it.—E. R. P.]

d. Pain about the umbilicus occurs in inflammation of the diaphragmatic or parietal peritoneum. Branches No. 7 will explain this symptom. They also do, the pain in vomiting in peritonitis.

[*e.* The branches of the phrenic to the inferior vena cava associate the action of the liver and diaphragm with that vessel, in some way not yet understood.—E. R. P.]

The Typhous Process under expectant treatment. By G. ZIMMERMANN, of Hamm.

THE author maintains that the treatment of the typhous process may be still more expectant than is customary, and that it is only in this manner that certain unsettled questions can be solved; some of which he endeavors

to answer. [In this way alone can we obtain the *natural history* of the process in question.]

He treated a considerable number of typhus patients of both sexes, without any internal remedies. In addition to a proper diet, fresh water and fresh air, nothing was administered except gum-water, and, at times, a warm bath or cold effusion, when the torpor or delirium became too severe. Where the affection of the lungs (splenization) suddenly supervened, and was attended by an increase of the existing fever, the author practised a small blood-letting, and commends the result.

With reference to the course of the disease, he separates the *local* from the *general*. As a *general* disease: the typhous process is considered typical throughout; has its stage of rise, status, and decline, and terminates, in the more moderate cases, in 21 days; and in the more severe in 28. The local accompaniments of the typhous process may commence and terminate at very different periods; and the duration is also very difficult to determine.

For the determination of the development and recession of the typhous process, it is an important point to ascertain the peculiar heat by the thermometer, and to examine the urine. Up to the 14th day, this peculiar *heat* remains almost uniformly between 38.7° and 40.5° (average, 40.2°) centegrade (104.36° Fah.); from this period it diminishes to between 37.5° and 40° (average, 38.8°); or 101.8° Fah.—which corresponds to the stage of decline. With the 21st, or the 28th day, it reaches its normal degree, and hereupon convalescence begins; during which the remaining anatomico-pathological disturbances are repaired, and the restoration of the loss in the corporeal mass proceeds. Zimmermann thinks that the temperature is the surest—because a physical—measure of the strength of the fever: the *pulse* is less certain, and teaches only what influence the abnormal blood has upon the vascular system, and the nervous centres regulating it. Yet, according to his experiments in this disease, the frequency of the pulse is in tolerable harmony with the temperature.

In the *urine* the quantity of uric acid increases up to the 14th day, when it is almost uniformly doubled, and then diminishes again until, at the 21st or 28th day, it reaches the normal standard. On the 21st, or 28th day, the quantity and color of the urine is usually changed; the urine is increased twofold, and becomes lighter. With the 4th, 7th, or 14th day, the urine becomes dull, and forms of itself, or by the addition of acids, a lateritious sediment. This spontaneous clouding of the urine Zimmermann considers as a sign that an acute process has, in itself, the disposition to terminate in recovery, if it is not disturbed in its natural course.

The affection of the *nervous system* accompanying the typhous process, takes an increase with the eighth day, and attains its height at the fourteenth day, and then gradually declines; its crisis is a sound, quiet sleep. The sweats are to be considered as critical evacuations; they take place in the typhous process left to itself, with alleviation of certain phenomena, always about the seventh and fourteenth days, and, afterwards, several times at intervals. The *local disturbances* begin gradually, and are first observable when they attain a certain force; their disappearance is not noticeable.

The affection of the *intestinal canal* manifests itself by an albuminous diarrhœa; it also sometimes arises suddenly. Zimmermann considers it a necessary process for the removal of the products of the alteration of the blood, and leaves it to itself; usually, after an existence of eleven days, an

abatement of the local phenomena occurs; by the fourteenth day, the evacuations become pap-like, free from albumen, and sometimes even solid. If ascarides are expelled, it happens constantly about the 14th day of the disease.

The affection of the *lungs* [splenization] took place in all our author's patients, but at different periods, from the 6th to the 16th day; when it occurred after the 14th day, the intestinal affection had already begun to moderate. Simultaneously, a considerable increase of heat and respiration took place, but with a gradual improvement: it had no influence upon the fever, and had generally run its course in 21 days. Upon its sudden supervention, Zimmermann practised a small blood-letting, whereupon the symptoms abated. He considers the splenization a passive anomaly of the circulation.

The affection of the *kidneys* was absent only in slight cases. The fibrinous cylinders from the renal tubuli are characteristic; they are found in variable quantity between the 4th and 15th day, generally simultaneous with albumen. When the typhous process lasts 4 weeks, they remain till the 21st day; when three weeks, they disappear about the 18th day. For the most part the patients had pain in the renal region, which was increased by pressure.

The affection of the *spleen* was never wanting; its engorgement began with the second week, at the commencement of the diarrhœa, and earlier when this was earlier. The maximum of engorgement corresponded with the height of the intestinal disorder. Sudamina were rare; petechiæ never appeared; roseola did in every case. Zimmermann has never observed *sequelæ* after this simple treatment.—*Deutsche Klinik.*

New Entozon.—Dr. S. Mitchell describes, in the *Boston Medical Journal* for February 15th, what he believes to be a new entozon. We copy his description and cut; of the latter he says, it is a perfect facsimile as to size and shape.

"This and another similar one was passed by a little girl about 5 years of age, after taking a dose of calomel. The color was much like that of the lumbricoides. It was alive, and would writhe what appeared to be its tail for some time after its expulsion. Its anterior extremity has the appearance of a miniature elephant's proboscis, and was fimbriated at the end. There was no appearance of any other extremities." As will be seen by the drawing, it has much the shape and appearance of a young bird, minus legs and wings.

"The patient had long been complaining, and was much emaciated; had variable appetite, pain in the bowels, constant diarrhœa, and other symptoms of verminous irritation. She had previously been treated with various vermifuges without success. Several weeks after passing these, her symp-

toms not having mended any, and all other anthelmintics having failed, it occurred to me to use the pumpkin seeds. Accordingly, I directed the mother to rub up two ounces of the seeds and make an emulsion, and give one half at a dose, and the balance to be given in two hours; and this to be followed by half an ounce of ol. ricini. The first dose was given, which appeared to produce very alarming effects, the child writhing and screaming with pain in the bowels. The balance of the emulsion was, therefore, not taken, but a dose of oil was immediately given, which operated powerfully, in a short time bringing away over one hundred of this kind of animals. None of them exceeded in size the one I had in my office, but varying from that down to a very minute size. After their expulsion, the patient rapidly regained her health and strength."

PRACTICAL MEDICINE AND MEDICAL PATHOLOGY.

Infusoria in Woman's Milk.—In a communication published in a recent number of *Schmidt's Jahrb.*, Dr. Vogel states, that he has discovered infusoria, similar to those found in the incrustations upon the teeth, in that milk which induced sickness in the child, and destroyed the mother's health. If examined immediately after its removal from the breast, no general decision can be given as to whether a woman may suckle or not. In every case the question must be determined by a microscopic examination of the milk. Such animalcules are found especially in women who menstruate or suffer from hæmorrhages during this period. The milk has often a fine, thick white color, or is of paler hue; its consistence may be either thick or watery; its reäction is often alkaline, but generally neutral. Under the microscope it exhibits, according to its richness, sometimes but a few, at other times many, milk and cream corpuscles; these differ from the corpuscles of healthy milk by their pale yellow color, their want of metallic lustre, and their speedy decomposition. As regards the infusoria, they are little rod-shaped bodies, dark in the middle, surrounded by a lighter line, but exhibiting neither head nor tail under a magnifying power of 600 diameters; there are, however, feet in great number and of considerable length. The movement of these animalcules was swimming, and occasionally it was very active. Forward movement was wormlike, and an annular structure of four rings was observed. Mostly they twist screw-like, upon their axes. When they swim in a circle, they always swim from right to left. The length is $\frac{1}{1000}$ mmtr., their breadth four times less. They are best seen when the milk is diluted with water. In ammonia, diluted acids (even the lactic), they die immediately.

Children fed upon milk containing these infusoria, become sooner or later attacked by diarrhœa, and the evacuations are of a green color. This condition disappears as soon as healthy cow's milk is substituted. The author believes that this effect does not proceed from the infusoria as such, but from the same cause which produces the infusoria, namely, a process of fermentation in the milk itself. The ferment is, acccording to him, the congested and increased heat in the breasts, connected with the general excitement of the sexual system.—*Medical Times and Gazette, London, November*, 1853.

Apoplexy of the Uvula. By DR. SPENGLER.

AT a time when acute catarrhs were quite prevalent, a seamstress, twenty years of age, came to me in haste, saying, that while eating some soup a few minutes before, something had lodged in her throat. Upon inquiry, she stated, that in the morning she had gone to church, perfectly well; and that upon returning home, she had sat down to eat some soup; but at the first spoonful something caught in her throat. The soup was not hot, and consisted merely of beef-broth, without any admixture of solid materials. As I caused her to open her mouth, and pressed down the tongue, I saw the uvula with its inferior half lying upon the root of the tongue: it was elongated and thickened, and had a dark blue color in its inferior half, and the appearance as if a fully distended, very delicate, shining vesicle, filled with a dark blue fluid, were bound about the whole lower half of the uvula; the whole diseased part was of the size of a bean. The diseased part was separated perfectly from the healthy, the border was exactly defined, so that by the side of the dark blue began immediately the normal color of the upper half. As I touched the uvula with a spatula, a drop of thick, dark, coagulated blood flowed from the most depending point, upon the spatula, and the patient complained of a stinging pain, while she observed, "*that is exactly the spot where it sticks in my throat.*" Swallowing was performed without any great difficulty; but the substance swallowed, in passing by the uvula, produced in the latter a pricking, and caused each time a sensation as if a certain point in the throat was obstructed by a pointed foreign body. This feeling was the only symptom of which the patient complained. Neither the respiration nor the organ of voice presented any symptoms. The girl was also perfectly well in all other respects. I ordered a gargle of alum water, although it was with difficulty that I could convince the girl that nothing had lodged in her throat.

The gargle was twice colored with blood. But the next day all the difficulties of deglutition had vanished, the uvula had nearly its normal length and thickness, but the inferior half was yet somewhat nodulated, of a dirty dark red, no longer violet colored, but still shining. The general health was excellent. Upon the third day this redness had also disappeared, and the patient was discharged, cured.

This form of extravasation in the uvula is rare. I have already often observed extensive epidemics of angina, but had never before seen a case of this kind. It is rarely mentioned in medical literature.

As regards the etiology of this disease in the present case, the existing epidemic constitution disposes to hyperæmia of the mucous membrane of the fauces and air passages. Through the long tarry in a cold church, the hyperæmia of the generally lax, uvular mucous membrane was increased; the over-distension of the vessels could no longer be so readily restored to an equilibrium, on account of the depending position and the weight of the uvula; a stasis took place; and it only required a mechanical momentum to bring on rupture of the engorged vessels in the distended mucous membrane, and to induce an *apoplexy*. We need not suppose that the soup was too hot, or that a pointed, sharp-cornered, or any other body, was swallowed: the simple momentum of deglutition itself, perhaps of a large spoonful, which was swallowed somewhat hastily on account of a long fast, was amply sufficient, through the pressure occasioned thereby upon the over-

distended uvula, to induce rupture of the vessels, and consequently infiltration of blood—*apoplexy.*—*Deutsche Klinik, Jan.* 1854.

Treatment of Psychical Disturbances in their First Stage. By Dr. Erlenmeyer.

Upon the treatment of psychical disturbances at their commencement, often depends the whole course of the disease, and especially the final issue in recovery or hopeless idiocy. A very common method consists in making large abstractions of blood, which seem required by the frequently exalted temperature of the head, the accelerated circulation in the cranial arteries, and the over-distension of the veins; in a word, the cerebral congestion, as it is usually expressed. Although the experience of all countries declares this treatment inappropriate, in most cases even positively injurious—although the testimony of all our hospitals for the insane is opposed to it; yet numerous cases still occur in which patients are brought, with rapid strides, to incurable idiocy, by means of copious blood-lettings.

The time is not long gone by, when, in our best insane hospitals, the use of narcotics, in the treatment of psychical diseases, was wholly interdicted. This view was first changed by the recommendation of opium by Dr. Herman Engelken; and this remedy now began occasionally to be tried, and, indeed, in somewhat larger doses than usual. The excellent results which followed this practice, in certain cases, continually encouraged to further trials; so that now it is considered indispensable by our best physicians.

The form of psychical disturbance in which opium succeeds best, is melancholy, in its various shades. It animates the patient, exalts innervation, and gives to the despairing sufferer new courage. I have tested this remedy in private practice. With few exceptions, mental disturbances, in their first stage, accost us as a melancholic temper, so that these cases also appear appropriate for the administration of opium. Upon different occasions, when I have been called to the treatment of commencing mental disturbance, I have, therefore, decided upon the exhibition of opium, and have seen really surprising results from it, since many patients have not only been temporarily improved thereby, but for the most part have been completely cured.

Opium administered in large doses, operates, in many respects, entirely different from small doses. It produces no congestion of the brain; it does not induce constipation—on the contrary, I have, in several cases, observed severe diarrhœa following the use of this remedy, which required its discontinuance. I have, in all cases in which constipation followed the exhibition of small doses at the commencement, seen this disappear upon its continued and increased administration. The nutrition of the patient is very quickly increased, and I have repeatedly seen the weight of the body gain from two to three pounds a week. The courage of the patient, which, in melancholy, is so depressed, becomes exalted; the constant complaints and lamentations are silenced; in short, the patient, in a brief time, is both corporeally and mentally changed.

In the hospitals, the exhibition of opium has been carried to six grains

at a dose; and several physicians, especially those who first commended the practice, have carried it still farther, without observing any injurious effects. At the commencement of psychical disturbances, such doses, though they may be well borne, are not at once necessary; and the exhibition of from two to four grains twice a day will suffice completely to allay incipient melancholy.

The best form of opium is the powder, as such, or made into pills; whilst the tinctures and alkaloids have not been so efficient in my hands.

Whilst I now proceed to the indications and contra-indications, I should observe, in the first place, that the data brought forward are imperfect; and that I here mostly appeal to symptoms, will be excused by the reader, who knows full well that the diagnosis of the condition lying at the basis of mental maladies is infinitely difficult.

The highest indication for the exhibition of opium is the hyperæsthesia, which presents itself at the commencement of psychical disturbances in so manifold a manner. It matters not whether this hyperæsthesia be of peripheric or central origin; nor is it of any consequence in which division of nerves it occurs. The excellent effect of opium in pure neuralgias, should have long since led to its administration in hyperæsthesia of other nerves; and would certainly have done so, had not various fears, which were based more upon theory than practice, deterred therefrom. That opium is not so dangerous a remedy as it is generally represented in the manuals of Materia Medica, I have thoroughly convinced myself; and many of our German physicians, at the head of insane hospitals, will agree with me, whose authority must be acknowledged by every one.

Almost two-thirds of all psychical maladies commence as hyperæsthesiæ. One of the most common is the hyperæsthesia of the *Nervus Vagus*, with greater or less participation of the sympathetic, in the well-known form of præcordial distress, which Fleming has so well described, and which, together with headache, he enumerates as the most constant symptoms of psychical disturbances. I have observed the præcordial distress in very different constitutions, as well of central as of peripheric origin, and always perceived good effects from opium.

The result is surprising when this præcordial distress is connected with psychical hyperæsthesia, a condition which is usually designated as *hypochondriacal melancholy*. These patients are fearful tormenting spirits to the physician, because they cannot be dissuaded from their hypochondriacal ideas by any process of reasoning.

A more numerous class of hyperæsthesiæ, which occur mostly at the commencement of psychical diseases, are the sensual. It is wonderful to what perversities patients are often led by this kind of alienation of the nerves of sense. A great part of the aversion to food occurring at the beginning of mental maladies, depends upon the hyperæsthesia of the glossopharyngeal or olfactory nerve. In food prepared in the ordinary manner, the patients smell and taste all possible singularities; when there is also simultaneously hyperæsthesia of other nerves, often of the vagus, they are sorrowful, anxious, distrustful, smell poison in their food, which increases and justifies their anxiety, and they begin to resist nourishment. Another complaint which we frequently meet with in patients of this kind, is that those about them know their thoughts. I have found this in many cases, where there was as yet no particular mental derangement; it is evidently a

minor degree of hallucination of hearing, induced by hyperæsthesia of the acoustic nerve. Such a condition very commonly precedes the outbreak of peculiar hallucinations, as I have repeatedly observed in a patient who suffers periodically from hallucinations of hearing. A short time before the particular hallucinations, he has the sensation as if his thoughts were expressed by those about him, only that he does not clearly hear the particular words, as is the case upon the full development of the hallucination.

Most of the conditions which occur at the beginning of mental diseases, may be referred to these hyperæsthesiæ, which are usually designated by all sorts of other names,—*nervous irritability, exalted nervosity, nervous derangement, &c.*

When these hyperæsthesiæ exist in the manner just described, independent of any organic disease of the brain, manifested by anæsthesia, paralysis, &c., without the existence of any more serious affections of other important organs, of the heart, the lungs, the digestive apparatus, &c., which must be looked upon as the cause of the incipient mental disturbance, opium will do excellent service, and if it does not completely and permanently cure, it still effects an important alleviation; but in the last-mentioned cases it does no good, and often may do harm.

There is also another contra-indication, which is not, however, very frequently in the way; it is vomiting occurring after the administration of small doses. We need not be much disturbed, nevertheless, on this account, since no greater disadvantage is to be feared than that opium will do no good. I must especially insist, that a coated tongue and other gastric symptoms should not deter us from the use of opium, since this is observed in almost all cases of psychical disease, immediately at the opening of the scene, and very commonly occurring as the first expression of alienated nervous function. Opium allays these so-called gastric symptoms generally very quickly, enlivens the appetite, and stimulates nutrition better than all stomachics. There are individuals in whom there exists an idiosyncrasy against the smallest doses of this remedy, who become thereby more excited, in whom a new train of symptoms is induced, as palpitation of the heart, ringing in the ears, greater disquiet, complete sleeplessness; in these persons we should desist at once from the farther use of opium.

Opium does excellent service, not only in melancholy, but in all other forms of psychical alteration which depend upon hyperæsthesia, if it is employed in the first stage of the difficulty, whilst in all psychoses of a *torpid character*, it produces little or no benefit.—*Deutsche Klinik, Januar.*, 1854.

MATERIA MEDICA, PHARMACY, AND THERAPEUTICS.

Effects of Belladonna in Poisoning by Opium.

We have received from Thomas Anderson, M. D., Curator of the Museum of the Botanical Society in Edinburgh, a paper with the above title. It is of so suggestive and practical a character that we at once insert it, and desire to call to it the especial attention of our readers.

Last winter I was engaged in a series of experiments on the therapeutic actions of the Atropa Belladonna. In the course of my researches, my attention was more particularly directed to the state of the pupil and nervous

system resulting from its internal administration. I also pursued my investigations on this subject in connection with a remark of Dr. Graves, in his clinical lectures, somewhat to this effect, that in continued fever with contracted pupils and coma, we are perhaps entitled to suppose that, if we can, by an agent administered internally, so affect the brain that the pupils shall become dilated, the other symptoms of cerebral derangement will also be removed.

Acting on this theory, I gave belladonna to several patients laboring under the ordinary continued fever of this city (Edinburgh), with coma and contracted pupils, and in a large number with favorable results. The idea then occurred to me, that, perhaps, belladonna would likewise be found beneficial in relieving the coma with contracted pupils, occasioned by poisoning with opium. However, I then dismissed the notion from my mind as absurd, and as I soon became otherwise occupied, I forgot it.

It again recurred to me in November, when using belladonna externally; and I determined to test it by experiment as soon as a case of opium-poisoning should occur. This I was soon enabled to do, as a patient of whom I had charge, and laboring under delirium tremens, having received an overdose of the solution of the muriate of morphia, became comatose. He had taken in thirty-six hours two ounces of the solution of the muriate of morphia, and it had been continued by the attendant after sleep was procured. When I saw him he was in profound coma, his breathing was stertorous, amounting to no more than four or five per minute, and his pupils were contracted to mere points. His pulse was excessively weak, and rather slow; it was quite impossible to rouse him. I ordered him immediately the following mixture: Tincture of belladonna, six drachms, in five and a half ounces of water, of which an ounce was to be given every half hour. Three ounces of the mixture were administered with great caution, after which his pupils began to dilate. The six drachms of the tincture of belladonna were taken, and in four and a half hours after the first dose of it was given, the patient was in the following condition: The coma was entirely gone, respirations were between twenty-two and twenty-five per minute, the pupils were much dilated, the pulse had risen to nearly one hundred and twenty in the minute, and was also increased in strength. His countenance also, from being cold and pallid, had become much flushed, and the whole body was much warmer.

He replied readily and coherently to all my questions.

He continued to improve for three days after; when, rising suddenly to stool, he fainted, and before the assistance of the nurse could be procured, he was dead.

A fortnight afterwards, I had another opportunity of testing my views. A woman, about fifty years of age, took, at 4 o'clock, P. M., two drachms of laudanum, and at half past 5, P. M., three drachms more. She was brought to the infirmary at 8 o'clock, P. M. After making vain attempts to rouse her from the coma, by walking her about, &c., the stomach-pump was used at a quarter past 8 o'clock. By this means her stomach was thoroughly evacuated, but no trace of opium was detected by smell or sight. It had probably been all absorbed. A current of electricity was then applied to her hands for nearly ten minutes, but without rousing her. I saw her at a quarter to 9, P. M., for the first time; and on being told that she

had been poisoned by laudanum, I determined to try the effects of belladonna.

At that time her pupils were contracted to mere points, her respiration was stertorous—ten per minute—the pulse was feeble, and the extremities rather cold. Between 9 and half-past 9, I gave her one ounce of tincture of belladonna in three ounces of water, which was all swallowed, but with difficulty. In the course of the next half-hour, two drachms more were administered. At 11, P. M., the first alteration in the size of the pupil was observed; the respirations had also then increased to twelve or thirteen in the minute, and the pulse was much stronger. The symptoms continued to improve till 2, A. M., when all indications of opium poisoning had disappeared. The woman was then sitting up in bed, talking to the nurses, with pupils dilated to a little more than their natural size, and still slightly sensible to light. The extremities were quite warm, the pulse was about 100, and of good strength.

She gave me a coherent account of her motives for taking the poison, of the amount of money she had spent in purchasing the laudanum, and the names of the druggists where it had been procured. She also replied sensibly to questions about her family, and the age and occupations of her children. She continued awake till nearly 4 o'clock, A. M., after which she slept till 9, A. M. In the morning I found her pretty well, her pupils being no more dilated than they were four hours after the first administration of the belladonna. She complained, however, of nausea, but unaccompanied with vomiting. This symptom, along with the dilated pupils, had entirely disappeared in the course of two days. She was kept in the hospital, under observation, for ten days after the accident; at the end of which time she was dismissed, perfectly well. The tincture of belladonna used in both these cases, was of the strength of four ounces of the leaves to two pints of rectified spirit, and prepared by percolation. Half a drachm is considered a full dose. I have seen dilatation of the pupil produced by a drachm given at once.

So much, at present, for the action of belladonna on persons under the influence of opium, I will now very briefly notice some observations on the simultaneous administration of opium and belladonna, or its congener, hyoscyamus.

My attention was accidentally directed to this subject some weeks ago, from a circumstance that happened to one of my patients. A man laboring under phthisis, and unable to rest at night from the violence of his cough, had the following mixture prescribed for him, as a soporific draught:

Sol. mor. mur.—one drachm.
Tinct. hyoscyami—two drachms.
Aqua cassiæ—three ounces.

He took half of this draught at 11, P. M., but without obtaining any sleep; and before the morning the whole of it was given, but still with no effect. For two nights more. the same dose was repeated, but with no better result than at first. At last, I determined to try the effect of morphia alone; and accordingly I ordered a draught of thirty-five drops of the solution of the muriate of morphia, diluted with cassia water. After this he slept soundly, and therefore the same amount of morphia was continued for several nights, with the same result—sound sleep.

I mentioned this case to several of my friends, and two or three of them remembered similar cases which they had met with; but the sleeplessness following the simultaneous use of the medicines had been ascribed to some peculiarity in the constitution of the patient, and not to the opposite actions of the drugs upon the nervous system.

In the "Association Medical Journal" of the last week of November, 1853, I saw the following interesting case bearing on this subject; it is an abstract from the American Journal of Medical Science: "A child, nine years old, swallowed two suppositories, each containing two grains of opium and two grains of extract of belladonna. It went to sleep not long after. The mother awoke it at the end of four hours with great difficulty, when very free vomiting ensued, producing great exhaustion. The drugs were taken at noon, and at 7, P. M., the child seemed only a little fatigued and sleepy. It had eaten dinner immediately before swallowing the poison; and Dr. Coale (who relates the case) suggests that this may have retarded absorption."

Notwithstanding the very interesting, and, to me, almost conclusive nature of these experiments, I am not prepared, nor do I wish, to say that I have discovered an antidote for poisoning by opium. In such cases, however, I believe that belladonna or hyoscyamus will be serviceable, on this supposition, that, if we give an agent whose action on the brain is opposite to that of opium, as soon as its minor physiological effects are developed, the evidences of the action of the opium will disappear. It seems to me that these properties exist most markedly among the members of the natural family Atropaceæ. (See a paper on the Solanaceæ, by Mr. J. Miers, in the "Annals of Natural History" for March, 1849. Also an abstract of a paper by myself on the Solanaceæ in the "Annals" for June, 1853, and the "Phytologist" for May, 1853.)

Many plants of this order, such as species of Atropa, Hyoscyamus, and Datura, act as exaltants of the nervous system, increasing the rapidity of the respiration, and the strength and frequency of the pulse, causing delirium of various grades of violence, accompanied till death with dilated pupil, and terminating in coma, probably merely the result of exhaustion of the powers of the system. Now, these are effects quite the opposite of those observed daily as the consequences of the administration of opium. That drug exerts its poisonous influence as a depressant of the vital powers, diminishing the number of respirations, weakening the heart's action, and causing coma, as one of the first alarming evidences of its effects.

When talking lately to Dr. Garrod of my views of the treatment of poisoning by opium by belladonna, he told me, that in his opening lecture, delivered last October, in the University College, London, he had stated the converse of my idea, viz.: from the resemblance of the poisonous action of belladonna to delirium tremens, in which disease opium is a most approved remedy, it is probable that, in poisoning by belladonna, opium may be found advantageous.

In conclusion, I will offer a few practical hints to any who may be inclined to test my views experimentally. That, taking the pupil as the index of the state of the brain, it is desirable to produce slight dilatation as speedily as possible.

Now, in order to overcome the opposite effects of the opium, it is necessary to give doses three or four times greater than what would produce dila-

tation in a healthy adult. The first two cases that I have cited, prove that no one need fear that their patients will thus be doubly poisoned. The tincture made from the leaves is the most uniform preparation. Four or six drachms of it might be given at first, and if that amount does not succeed in dilating the pupils in the course of an hour, the dose may be repeated. The careful application of a plaster of equal parts of the extract and lard to a blistered surface might be useful. Lastly, the internal use of small doses of atropine, as, for example, one-fourth, or even one-half of a grain in solution, will rapidly remove the contraction of the pupils.

Poisoning by Aconite.—Two recent cases of poisoning by aconite are recorded in the foreign journals, each illustrating the danger of entrusting such remedies to the care of ignorant persons.

The first case occurred near Bristol, England, the victim being the inmate of a convent in that vicinity. She was undergoing treatment for tape-worm, and was ordered by the medical attendant a decoction of pomegranate bark and quinia. The sister-assistant administered, by mistake, one drachm of Fleming's Tincture of Aconite and Morphine, which had been prepared as an external application for toothache. The result was, the death of the girl in five hours.

The other occurred at Glasgow, the patient (a Mr. Brown) dying in four hours after the administration of the fatal dose. It appears he applied to a young friend, a medical student, for a prescription (as he was attending in one of the first drug stores of the city.) The young man prepared for him a dose of twenty-five drops of tinc. of aconite, having seen a like quantity prescribed in some French work; whereas, the British tincture being much stronger, the usual dose is from five to eight drops.—(Condensed from *Lond. Lancet*, *Med. Times*, &c.)

A correspondent of the *Pharmaceutical Journal* calls the attention of its readers, not only to the danger attending the several formulæ for the tincture of aconite, but also that arising from the conflicting opinions with regard to the dose of the British preparation. One contends the dose is from one to five drops, and that eight drops have been known to produce alarming effects. But Mr. Squire gives the dose as from seven to ten minims; Mr. J. Denham Smith, in his translation of the Pharmacopœia, in one place, from two to ten minims,—in others, from one to six minims; whilst Dr. Nevins actually states it to be from three to fifteen minims, "or even *more*."

We consider the only prudent course in prescribing such potent remedies, is to commence with the minimum dose, and gradually increase it.

PART IV.—HOSPITAL RECORDS.

HISTORY OF THE NEW YORK HOSPITAL.

(Continued from page 144.)

THE location of the Hospital is perhaps not the best which could have been selected, had it been constructed with reference to the present extent and requirements of the city; still, its situation is not by any means so inconvenient as has been sometimes represented and objected. It is within a short distance from the termini of the various city railroads, readily accessible to a large portion of the residences of the laboring poor, who are likely to seek for admission to its wards; and not very distant from the principal shipping wharves, from whence the casualties of seamen, stevedores, and others employed in the service of the mercantile marine of the city, are brought. On the north side of the leading thoroughfare, Broadway, opposite to the termination of Pearl Street, which communicates with the whole extent of the business portion of the East River, and lying between two streets which extend to the North River, the avenues of access are sufficiently numerous and conspicuous. It is a striking object to the stranger, from the neat and well-kept plots which lie before its principal doorway and skirt on Broadway. The iron railing and gateways are substantial, but not elegant; and its gray, granite front, clothed here and there with ivy, give it a sombre and venerable look, which contrasts strongly with the glitter of the gay shops on either side of the street. There is also a quiet look about it, when viewed from the midst of the bustle and noise around, most suggestive of its uses. The style of architecture is sternly simple—Doric it has been called; whether this term is strictly applicable or not, scientifically, we do not profess to determine; it is at least sufficiently expressive for that style which permits of little, or we should rather say, in this instance, no ornamentation. Everything around, without and within, is neat, tidy, and clean. The beds are most convenient and comfortable, and, in those intended for surgical cases, amply provided with such mechanical contrivances as are essential to the maintenance of proper position and due convenience of both patient and attendants. In some of the wards the beds are rather closely packed, a defect only to be remedied by the provision of more extended accommodation. We are not aware, however, that this crowding exists to such an extent as to promote the generation of a greater amount of epidemic disease, or, of that which does exist, a more aggravated type, than is common to all hospitals. Erysipelas would appear to be the principal malady of this character which may be regarded as indigenous to the surgical department; its visitations are capricious, and

its character variable. Typhus would seem to obey the same laws, as to season and other circumstances, which obtain in Europe.

The elevation of the building may in a great measure account for this comparative immunity, it being considerably above the level of the surrounding streets; and doubtless the improved and efficient system of ventilation and the rigidly observed hygienic rules contribute much to the same end.

The affairs of the Hospital are under the management of twenty-six Governors, elected annually from among the members of the Society. The latter are composed of the Mayor, Recorder, Aldermen and Assistants of the city; the rector of Trinity Church, the President of Columbia College, and the senior minister of the several religious denominations, as well as several other individuals originally nominated in the Charter, and such other persons as shall be chosen from time to time by a quorum of the Governors.

The Board of Governors choose from among themselves a President, a Vice President, a Treasurer, and a Secretary. The Governors and officers are severally required to take an oath or affirmation for the faithful performance of their duties. The Board regulates its own proceedings, determines the duties of their executive officers and other officials, the admission of patients, and controls the Library and Museum by a code of By-laws enacted by themselves. They also appoint two Committees:

1st. *A Visiting Committee*, consisting of three members, who meet twice a week at the Hospital, for the admission of patients. No patient is admitted without having been previously examined by one of the physicians or surgeons, house-physician or house-surgeon. They determine upon the amount to be paid as alimony in the case of pay patients, and see to the security of its payment. They receive and inquire into all complaints, from every source, and adjudicate upon the same; having the power to discharge patients and menials, and to suspend the house-surgeons and physicians, the apothecary, and their assistants, reporting the same to the monthly meeting of the Governors. They take charge of the property of the Hospital, and in every respect control and regulate the internal management of the Institution.

2d. *An Inspecting Committee*, consisting of two members, who visit the Hospital at least once a week, and inquire whether the by-laws and regulations relative to the management and economy of the house are duly observed and carried out; particularly examining the condition of the wards, the conduct of the officers, servants, and nurses.

The President and Vice President are also required to visit the house once a month, and report to the monthly meeting. The services of the President, Vice President, and Committees, are rendered gratuitously.

The Board of Governors appoint four Physicians and six Surgeons; one House-Physician and two assistants, and two House-Surgeons and two assistants; an Apothecary; a Superintendent, or Steward, and assistant; a Matron; a Clerk, and an Orderly.

Not in the charter empowering the Governors to make these appointments, nor in their own code of by-laws declaring the duties and privileges of the Consulting and Attendant Physicians and Surgeons, have we been able to trace one word explanatory of the mode by which these appointments are made, or the qualifications necessary for the post. All that we find on the record is, that they may, "by the majority of their own voices, from time to time, elect, nominate and appoint such and so many physicians and surgeons as they shall judge necessary," * and that these "are selected from the most eminent of the profession, and are annually appointed by the Governors." † Yet for the residential medical officers and their assistants, the qualifications are very fully stated, as well as the source from which the principal recommendations shall come, namely, *three* of the attendant medical officers.

We do not mean to assert that there has really been any abuse of this peculiar prerogative of the Board, or to insinuate that the present staff are exceptionable; although we will frankly admit that some of the more recent appointments do not appear to us to have been made wisely as regards the claims of many older and at least equally eminent practitioners in the city.

It is a mode of proceeding, in reference to these appointments, not consonant with true republican principles; nay more, it is not even in accordance with the practice of the most liberal of the institutions of the old world. There, the selections are made by a fair and timely notice of the occurrence of a vacancy in the staff; a brisk and general canvass of members of the particular charity or institution, where the appointment is vested in them, and who all meet for the purpose of giving, as far as they can do so, a representative, popular expression of confidence in the professional standing, reputation, and merits of the respective candidates. Or, in those instances where there is the nearest approach to the close-borough monopoly system, the election is made by the medical staff themselves, who are supposed to be the best judges of the professional qualifications of the person to be appointed.

Here, on the contrary, all that the public at large, the members of the corporation itself, and the medical profession (except the favored few who seem to exist everywhere, and generally to be an equally exclusive body),

* See Charter of Incorporation, page 11.

† See "Account of the New-York Hospital," previously quoted, page 75.

know of any change in the number or persons of the attendant physicians and surgeons, is the announcement of the *fait accompli*, in the newspaper or the annual report of the Board.

It is to be hoped that this defect in the otherwise admirable arrangements for the government of this ancient and useful institution, will in time be remedied, so as to lay the appointments of physician and surgeon open to the competition of the whole profession, and election by the general body of the members of the corporation. And this might be effected by such a modification of the by-laws of the institution, or, should it be necessary, such an alteration in the charter by the Legislature, as to secure due public notice of the time and manner of the annual election of these officers, and their requisite qualifications. At present, it is virtually a nomination of some previously selected individual known only to the appointing Board.

It is an appointment for which all men who possess any love for and zeal in their profession, and who seek to obtain an honorable distinction for skill and experience, are naturally ambitious. It always confers upon the fortunate holder a certain prestige in the community among whom he may reside and practice, and enables him to earn for himself, among his professional brethren throughout the world, an enviable fame and reputation, by promulgating with the authority of his position, his peculiar views on the nature of disease and the results of his individual methods of treatment and observation.

Such a course would tend to inspire confidence in the institution, by the assurance which the beneficiaries would have, that their contributions to the relief of their suffering fellow-creatures were sustained by the exercise of that professional skill and knowledge deemed to be the most efficient by a majority of themselves. And, as the largest contributors to the support of the institution, through the grant of the General Legislature, the people of the State would participate in this assurance: as their almoners, it is due to the Legislature that such a popular and liberal mode of election should exist and be enforced.

The difficulty of procuring a sufficient number of experienced and efficient nurses obtains everywhere. The repugnance or prejudice which exists in the minds of those who usually fill such situations, to the confinement and duties, and against the nature of the employment, as well as the natural apprehension of the risk attending it, are such as to prevent many from engaging in it, except under the inducement of a high rate of remuneration. It would be better, in all cases, to push this to the utmost extreme consistent with the due economy necessary in all eleemosynary institutions, rather than that the poor sufferer should be at the mercy of an ignorant or indifferent nurse. Such observation as a casual visiter can make, would lead to the conviction that there is generally a deficiency in the

number of the nurses in the wards. All that vigilance on the part of the residential medical attendants and their assistants can effect, seems to be fully accomplished; but there would certainly appear to be some want of efficient attendance in the more menial offices, which can alone be properly performed by a nurse.

No patients laboring under *incurable* diseases are admitted, being regarded as fitter objects for the Alms-house. Infectious and contagious diseases are also declined.

An examination of the yearly returns of classified disease, treated in the institution, show a large preponderance of surgical cases, and particularly those arising from mechanical violence. Thus, if we take the aggregate of three years—say 1848, 50, and 52, as stated in the annual summary tables of those years—we find them to be as follows:

		Cured.	*Died.*	*Discharged.*	*Remaining.*
Contusions,	495	431	12	29	23
Dislocations,	41	32	—	8	1
Fractures,	1210	854	163	81	112
Gunshot,	54	44	6	4	—
Injuries,	393	236	74	34	49
Wounds,	453	377	25	33	18
Stabs (2 years),	30	22	6	1	1
	2,676	1,996	286	190	204

If we take the aggregate number of admissions for these three years, we find it to be 10,752; it follows, therefore, that of the whole number of cases of all descriptions of disease, admitted to the medical and surgical wards, rather more than *one fourth* are surgical lesions resulting from external violence. And if, in this estimate, we embrace the cases of poisoning, drowning, and coup de soleil, the relative proportion will be considerably increased.

By the above statement, it appears that in the whole number of these cases, the ratio of mortality is something under 11 per cent.; if we exclude from the calculation those cases discharged, from various causes, it will be about 11½.

We have selected these years for the basis of our examination, in order to confine the extent of the investigation within the limits of our space; and it appeared to us that by taking the alternate years of the last six, previous to 1853, the annual report of which is not yet published, we should select a very fair average.

Next in importance, numerically, we find the class of Fevers, which are thus arranged:

		Cured.	*Died.*	*Discharged.*	*Remaining.*
Febris (?),	687	608	29	15	34
Intermittens,	457	335	1	10	11
Remittens,	483	413	40	11	19
Typhus,	704	536	141	13	14
	2,331	1,892	211	49	78

Here the ratio of mortality in the gross number of cases, excluding the discharges, is a small fraction over 4¼ per cent.; in Febris (by this term is meant, we presume, continued fevers), 6¼; Intermittens, remarkably low; Remittens, not quite 1; Typhus, 17⅜.

The remaining portion of the surgical cases are thus given:

		Cured.	*Died.*	*Discharged.*	*Remaining.*
Abscessus,	182	126	19	24	13
Aneurismus,	10	—	6	4	—
Calculus,	2	—	1	1	—
Carcinoma,	23	8	6	8	1
Disease of Bone,	62	36	6	16	3
" Eye,	175	115	—	37	23
" Joints,	47	23	—	18	6
" Ur. Organs,	389	260	13	74	42
Erysipelas,	191	137	41	3	10
Fistula in Ano,	28	12	1	8	7
" Perineo,	1	—	—	1	—
" (Vesico-vaginal),	2	—	—	2	—
Fungus Hæmatodes,	3	2	—	1	—
Furunculus,	4	4	—	—	—
Gangrena,	22	5	14	—	3
Gonorrhea,	54	36	—	14	4
Hæmorrhoides,	28	11	1	10	6
Hernia,	21	10	6	1	2
Inflammatio,	114	87	9	11	7
Morbus Coxarius,	1	—	1	—	—
Paronychia,	38	27	—	6	5
Syphilis,	950	686	13	133	92
Synovitis,	26	18	—	5	3
Tumor,	28	8	1	9	8
Ulcus,	356	256	2	57	41
Ustio,	179	102	31	18	13
Varix,	5	4	—	1	—

In this table we are struck with the small proportion of calculous disease. We shall, at a subsequent time, examine all the reports in detail, to ascertain whether this is a constant feature. Hernia does not appear, in this average, to be as frequent as it is found in European Hospitals: the ratio of mortality is something over 33 per cent.

The proportion of disease of the urino-genital organs is so large as almost to justify the establishment of a separate institution for their reception. The total number of the various kinds amounts to 1,424, or a yearly average of 430 cases—a nice little number for a glorious clinique, *à la Ricord*. The ratio of mortality is low, 1⅞.

Ulcers form a large item, and the results are highly satisfactory. We have classed inflammations under the surgical cases, as we presume them to refer to external affections, the various internal inflammatory diseases having been classified by their proper generic terms: it would have been, perhaps, more satisfactory to have designated the tissues involved. In Erysipelas, the ratio of mortality seems high, being nearly 22 per cent.

Next in order, numerically, are diseases of the eye; and the table shows favorably for successful treatment.

Our space will not permit us to give the residue of the medical cases so much in detail, but we make the following important abstract of the principal diseases remaining on the tables:

		Cured.	*Died.*	*Discharged.*	*Remaining.*
Bronchitis,	129	88	4	11	26
Cephalalgia,	34	24	—	6	4
Constipatio,	61	46	—	7	8
Cutanei,	74	43	—	19	2
Debilitas (?),	87	59	10	13	5
Delirium Tremens,	199	151	31	7	12
Diarrhœa,	189	127	34	22	6
Disease of Brain (?),	58	28	16	14	—
" Heart (?),	34	—	11	18	5
Dysenteria,	228	131	63	23	11
Emphysema,	8	5	1	2	—
Enteritis,	12	9	2	1	—
Hemiplegia,	17	2	5	9	1
Hydrops (?),	30	10	12	7	1
Laryngitis,	21	15	1	4	1
Neuralgia,	37	17	—	18	2
Paralysis,	26	10	2	11	3
Peritonitis,	21	8	12	1	—
Purpura,	4	1	2	1	—
Phthisis,	161	—	61	69	11
Pneumonia,	207	135	48	10	14
Pleuritis,	35	26	2	5	2
Rheumatismus,	587	463	1	65	63

The first topic which suggests itself for remark, in the consideration of this portion of these tables, is the indefinite character of some of the terms employed in the classification: to these we have taken the liberty of affixing points of interrogation. What, we would ask, is to be understood by the exceedingly general term, Debilitas? Are we to conceive as implied, anæmatrophia, climacteric decay, marasmus, inappetence, or the result of previously existing disease? Disease of the brain!—phrenitis, ramollissement, tubercle, anæmia, hernia, or what else?

Disease of the heart!—carditis, fatty degeneration, ossification of the valves, hypertrophia, ectopia, or rupture? Hydrops!—hydrocephalus, hydrathorax, ascites, or anasarca?

It may be objected to this criticism, that to specify each form of the disease would extend the tables to an inconvenient degree. But while accuracy is the essential element in all statistical records, especially in those of a purely scientific character, we submit that an additional page or two ought not to be an obstacle worthy of consideration. It ought not to be forgotten that, although the annual report is addressed principally to the Legislature and lay members of the corporation, yet it is the only available record to a very large majority of the profession, of the result of the practice and the frequency of disease as it occurs in the wards of the Hospital; and there are many who use such publications with great advantage in the prosecution of their professional studies,

The exhibit of diarrhœa, dysentery, and rheumatism, here made, is of much interest and importance.

But we must unwillingly curtail our remarks.

The whole number of cases admitted, from the 1st of February, 1792, to the 31st of December, 1853, 99,930. There have been discharged as cured 70,235; as relieved, 5,890; by request, 5,741; as improper objects, 1,429; as disorderly, and having eloped, 2,994; died, 9,824: gross of 1853, 3,827. In this calculation is included 1,553 who were lunatics, and were received previous to the separate establishment of Bloomingdale Asylum. Of these, 704 were discharged cured; 239 as relieved; 278 by request; 61 improper objects; 65 disorderly; 154 died; and 52 transferred to Bloomingdale.

Some idea may be formed of the scale upon which the Institution is conducted, from the circumstance that the average yearly expense of the three years we have been considering, amounts to $63,650.

There are several other points of much interest, which we entertain a strong desire to display, but have not space for them at present; it may be that we shall recur to them at some convenient season.

Among the names of the members of the corporation, are to be found some of the most celebrated of those connected with the earlier history of the city, whose sons are yet among us, adding their quota to the success of this institution, and the general prosperity of the community.

The following compose the present Board of Direction, Medical Staff, and subsidiary officers:

Governors.—George Newbold, Esq., *President;* George T. Trimble, Esq., *Vice President;* John Adams, Esq., *Treasurer;* Robert L. Murray, Esq., *Secretary;* and Najah Taylor, Benj. W. Rogers, Gulian C. Verplanck, Benj. L. Swan, James F. Depeyster, John A. Stevens, R. M. Lawrence, Augustus Fleming, J. Shelden, James I. Jones, William M. Halsted, John L. Buckley, I. Donaldson, Stacy B. Collins, Augustin Averill, George F. Hussey, J. W. Beekman, Edwin D. Morgan, Caleb Swan, Russel H. Stevens, Esquires.

Physicians.—*Consulting*, Thomas Cock, Francis U. Johnson. *Attending*, Joseph M. Smith, John A. Swett, John H. Griscom, Henry D. Bulkley. *House*, H. S. Swift.

Surgeons.—*Consulting*, Valentine Mott, Alexr. H. Stevens, R. K. Hoffman, Alfred C. Post. *Attending*, John C. Cheeseman, Gurdon Buck, John Watson, Thaddeus M. Halsted, Thomas M. Markoe, W. H. Van Buren. *House*, C. Agnew, J. C. McComb.

Librarian, J. L. Vandervoort; *Curator*, C. M. Allin; *Chaplain*, Rev. W. C. Hawley; *Superintendent*, John L. Roome; *Assistant*, F. B. Ketcham; *Apothecary*, J. B. Sabine; *Clerk*, Robert Roberts.

[The Hospital Reports are necessarily excluded this month.]

PART V.—EDITORIAL AND MISCELLANEOUS.

NEWS OF THE BILL.—By a private letter from Albany, we are assured that the Anatomy Bill will undoubtedly pass, and will come up probably this day (March 1st) for final consideration. There does not appear to be any organized opposition to it; that which exists being principally in the way of making political capital out of the prejudices of those who are opposed to it.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.—The Forty-seventh Annual Meeting of this Society convened in the Common Council Chamber at 11 o'clock, Tuesday morning, February 7th, 1854. The Society was called to order by the President, Dr. Jenks S. Sprague. The permanent members and delegates enrolled their names and took their seats. The Secretary, Dr. James H. Armsby, read the minutes of the last annual meeting. The Society numbers one hundred and twenty-eight delegates, and over a hundred permanent members. The President, Dr. Sprague, delivered an interesting address, which, we regret to say, our limits do not permit us to insert.

Dr. Peter Van Buren offered the following:

Resolved, That so much of the President's inaugural address as refers to the appointment of committees to present annual reports on subjects of interest to this Society, be referred to a committee of five, to report on the best plan to be pursued.

Drs. Hyde, Burwell, Barker, Shipman, and Jacobs were accordingly appointed that committee.

Dr. Hun then invited the members of the Society to his house on Tuesday evening. Dr. Armsby extended an invitation for Wednesday evening. Both of these invitations were accepted.

Dr. Cogswell presented a list of the officers of the Albany County Medical Society.

Dr. M. F. Cash offered a preamble and resolution relative to the Society and the profession taking measures to guard against the pernicious influences of quackery upon the public health. The paper was laid upon the table.

Dr. Cash then read a paper upon "Rational medicine, or the regular practice as it is." The paper was referred to the Committee of Publications.

Dr. Benedict called up the subject of diptheritic croup, laid upon the table from last year. Dr. B. spoke of alum as being a remedy for this disease. He had used it frequently, during the last five years, in form of a saturated solution, a teaspoonful given frequently, until free vomiting was produced, and in no case without good success. He spoke of the *true* form of the disease, and not of the spasmodic form which is so frequently met with. Dr. Rockwell said he could never perceive any earthly benefit from the use of emetics. He had tried them in vain. The speediest and surest way of relieving the urgent symptoms, and producing a cure, is by mercurializing the patient by fumigations of cinnibar. If alum would really accomplish so much, he should surely avail himself of its use. Dr. Bay

related his experience in the treatment of croup for the last thirty years. He had found the best success by the use of large doses of calomel. Dr. Burwell said that he had been disappointed in the use of nitrate of silver in croup. He found the effect of its application did not last over an hour. He was in the habit of using sulphate of zinc with ipecac., as an emetic. He had no more faith in alum than in any other mild emetic.

Dr. W. H. H. Parkhurst presented a very remarkable and interesting specimen and report of a case of extra-uterine conception, of forty-six years standing. Dr. Taylor offered a resolution requesting that a drawing be made of the specimen presented by Dr. Parkhurst. Adjourned till 3 o'clock, P. M.

Afternoon Session, 3½ o'clock.—The minutes of the morning session were read and approved. The Censors of the Western District reported that they had examined two gentlemen of the city of Buffalo, and they recommend to the Society that upon both of them diplomas be conferred.

Dr. March read a paper on, 1st, "Penetrating Wounds of the Abdomen, and Puncturing Wounds of the Intestines;" and, 2d, "Penetrating Wounds of the Larynx and Trachea." The paper was referred to the committee of publication.

Dr. Shumway read a paper on the reduction of the dislocation of the hip joint without the application of force. He saw the process demonstrated by Dr. Nathan Smith in 1815 and 1816. It was by this process that he had reduced all cases that had come under his care during the time he had been in practice. The process was brought forward in a paper read before this Society in 1852. That paper, written by Dr. Reid, claimed for him the discovery of that process. It was no demerit to Dr. Reid that he discovered that such a dislocation could be reduced without force; but as Dr. Smith lectured on the subject so many years ago, he thought "honor should be rendered to whom honor is due." Dr. Phelps said that he saw Dr. Physic perform this operation in 1810; but it appeared to have been done by accident. Dr. Physic said to the gentlemen around him, that he believed it to be the first case ever reduced without force. Dr. Shumway said that Dr. Smith mentioned to his class the case of Dr. Physic. It was only to the fact that Dr. Reid claimed, or it was claimed for him, the originality of the process that he objected. The paper was referred to the committee of publication.

Dr. Cash called up his preamble and resolution relative to the "Suppression of Quackery." Dr. Bissell hoped the subject would not at present be discussed by the Society. It would have no tendency to remove the evil. Dr. Taylor followed, expressing similar sentiments. Dr. Monell said that he thought the evil would be best remedied by instructing the patients of the relations that should exist between the patient and physician. The subject was further discussed by Drs. Van Buren, Phelps, and Shumway.

The Society then adjourned to meet at seven o'clock, preparatory to listening to the annual address. At 7 o'clock the Society met in the Assembly Chamber, when the address was delivered by the President, Dr. Jenks S. Sprague, after which, Dr. Rockwell presented the following resolution, prefacing it with appropriate remarks:—

Resolved, That the thanks of this Society be presented to the President, for his very interesting and able address, and that a copy be requested for publication in the transactions of the Society.

The resolution was unanimously adopted. The Society then adjourned until 10 o'clock, A. M., Wednesday.

Second Day—Wednesday, Feb. 8.—The minutes of Tuesday's proceedings were read and accepted.

The resolutions of Dr. Cash were called up, and after some discussion were lost.

Dr. Shumway presented the following:—

Resolved, That this Society entirely approve of the Bill "to promote Medical Science," now pending in the House of Assembly, and respectfully but earnestly recommend its passage, as an act due to science and humanity, and as indispensable to the security of the grave.

The resolution was unanimously adopted.

Dr. Phelps presented a preamble and resolutions relative to the encouragement of Medical Associations. After a short discussion, the subject was indefinitely postponed.

Dr. A. Clarke made a statement of forty-five cases of croup, treated by Dr. Willard Parker, of New York.

The table prepared by Dr. Cock, from Dr. Parker's notes, gave the age, sex, treatment, result, &c., of these forty-five cases. Thirty-one of these cases proved fatal, sixteen recovered. These cases were diptheritic croup. In twenty-five out of twenty-eight cases which Dr. Parker examined, the false membranes, or membranous effusions, were distinctly visible on the fauces. Dr. Parker has not noted whether he sought for this membrane in the other of the forty-five cases. Dr. Clarke gave definitely and minutely the treatment of these forty-five cases. They were variously treated—by calomel, antimony, ipecac., nitrate of silver, a mixture of lobelia and senega, hot water, alum, inhalation of the vapor of iodine, leeches, and blisters. He gave also the number of cases, and the result of the operation of tracheotomy, as performed by Drs. Parker, Post, Buck, Mott, Van Buren, Wood and Batchelor. He thought the result of tracheotomy was not such as to render it generally advisable. The majority of those that recovered were treated by calomel and ipecac.

The treatment of the unsuccessful cases were mostly related in detail. He gave also the history of the success of M. Trousseau's and Dr. Henry G. Smith's cases of tracheotomy.

Dr. C. further remarked that by Dr. Parker, the use of the water vapor and calomel was considered as most likely to prove efficient. This subject was discussed at length by Drs. Bay, Shipman, White, and Swett.

Dr. Clarke exhibited a specimen of a case where the false membrane had formed, and the operation of tracheotomy had been performed.

Dr. Taylor offered a resolution relative to the Comitia Minora addressing a circular to the several County Medical Societies in this State, urging the importance and advantages of keeping up their organizations; and that the said Comitia Minora be requested to obtain the opinion of the Attorney General relative to the obligation of physicians keeping up such organization under the existing law regulating the practice of physic and surgery. The resolution was adopted.

Dr. Sanders presented the following:

Resolved, That a committee of three be appointed to inquire into the circumstances under which the honorary degree of Doctor of Medicine was conferred upon a certain irregular practitioner, by Hobart Free College.

Dr. Sanders said, if the Faculty conferred the degree, knowing the character of the person to whom the resolution alluded, he felt strongly inclined to return his diploma to the college; for he was a graduate of that institution. Dr. Coventry said the degree was conferred without his knowledge. Dr. Spencer said, he was glad the gentleman felt such an interest in the institution, and was zealous for the dignity of the profession. He was no longer connected with the institution; but it was justice to himself and others to say, that the diplomas were changed some years ago, so that the Faculty did not now confer the degrees; but the Trustees of the institution could confer the degrees of M. D. and LL. D. upon whom they pleased, without consulting the faculty. The degree alluded to was conferred by them.

Dr. Hyde, from the committee appointed upon the recommendations contained in the President's inaugural, reported that they had selected a few subjects of especial interest to the profession, and named gentlemen to report to the Society, at its next annual meeting, upon the subjects specified, viz.:

1. Of Rest and the Abolition of Pain in the Treatment of Disease, Dr. T. W. Blatchford. 2. Of Internal Cancer, Dr. Alonzo Clark. 3. Treatment of Tuberculosis, Dr. T. R. Spencer. 4. Of Deformity after Fracture, Dr. F. H. Hamilton. 5. Of the Treatment of Pneumonia, Dr. A. L. Saunders. 6. Of the Comparative use of the Ergot and Forceps in Labor, by Dr. B. Fordyce Barker. 7. Of the Non-Contagious Eruptive Diseases of Children, their relation to modes of living, and their treatment, Drs. H. Townsend and Thomas Hun. 8. Of the Types of Fever, Dr. George Burr. 9. Of Croup, Dr. John A. Swett. 10. Of Epidemics—1st Senatorial District, Dr. Frank Tuthill; 2d do., Dr. G. C. Monell; 3d do., Dr. Thomas C. Brinsmade; 4th do., Dr. A. F. Doolittle; 5th do., Dr. C. B. Coventry; 6th do., Dr. A. Willard; 7th do., Dr. E. Carr; 8th do., Dr. H. M. Congor.

The report was accepted.

Dr. Cash offered a resolution, making the election of officers the special order of business at 4 o'clock this afternoon. Adjourned.

Afternoon Session.—The minutes of the morning session were read and approved.

Dr. Van Dyck, of Smyrna, who was yesterday invited to sit as an honorary member, made a statement of the present condition of medicine and medical literature in Syria and Palestine. Formerly, the East was the garden of literature, and medical science flourished there. But now the art only exists in the hands of ignorant men. Some of them bleed with a lancet, if they have one; if not, they use a piece of glass, or any instrument they happen to have. One man, Ahu Budka, has acquired a reputation as a surgeon, and performs the operation of lithotomy frequently with only a knife. He has no skill to tell whether the operation is necessary until after he has performed it. With one of these physicians he had a dispute, the physician asserting that the liver occupied the left side of the abdomen, so totally ignorant are they of the anatomy of the human body. Leprosy is one of the terrible forms of disease that exists there, and it is truly horrible. It is considered as contagious, and those afflicted are compelled to live by themselves. In the course of the disease, the fingers or the toes become so decayed as to drop off. A journey to Damascus is usually recommended.

There is something in the air or water at Damascus, or something else, that checks the progress of the disease.

The hour having arrived, the Society proceeded to the election of officers, with the following result: For *President*—Charles B. Coventry, Utica. *Vice-President*—Peter Van Buren, Albany. *Secretary*—Howard Townsend, Albany. *Treasurer*—Peter Van Olinda, Albany. *Curisors*—Southern District, John C. Cheeseman, Joel Foster, and William Rockwell; Eastern District, Barent P. Staats, T. Romeyn Beck, and Thomas C. Brinsmade; Middle District, John McCall, Benjamin E. Bowen, and Augustus Willard; Western District, Alexander Thompson, George N. Burwell, and Malthy Strong.

On motion of Dr. Barker, a committee of three was appointed to receive the names presented for the honorary degree of Doctor of Medicine, and from them to report such as were most entitled to the degree. Drs. Saunders, Bradford, and Willard were appointed the committee.

Dr. Rockwell, from the committee appointed to attend the examinations of the candidates for the degree of Doctor of Medicine, in the Medical Colleges in the city of New York, reported that they received invitations from the Faculties of the College of Physicians and Surgeons, and the New York Medical College, to attend their examinations. The committee did so, and with great pleasure testify to the thorough and searching examinations; and express the belief that no gentleman received a diploma who was not entitled to the same. The report says, also, that in the month of April, more than a month after the examinations had closed and the degrees been conferred, the President of the Faculty of the University School, in Fourteenth street, addressed a letter to the Chairman, Dr. Rockwell, setting forth the reasons for not acceding to the request of the committee to be present. The report was accepted. Adjourned.

Third Day — Thursday, Feb. 9.—The Secretary read the minutes, which were approved. The committee reported the names of Sardius Brewster, Jacob G. Snell, John W. Hinckley, and Elias P. Metcalf, as eligible for the honorary degree of Doctor of Medicine. On vote of the Society they were so recommended to the Regents of the University, for the Degree.

Dr. Saunders offered the following, which was unanimously adopted:—

Resolved, That the Society respectfully request and earnestly recommend that all the Colleges and Universities in this State having Medical Departments, confer no degrees of Doctors of Medicine, without the concurrence of the Professors in that department.

Dr. Cogswell called up the report of Dr. Rockwell relative to that committee attending the examinations of students at the New York medical schools. Dr. Rockwell said that at those examinations the committee were invited to ask such questions as they chose. They had, in some instances, done so, though not authorized by the Society. The committee was not invited to attend the examinations at the University. Dr. Wood said that he, as a member of that committee, had attended as many of the examinations as he could, and in no case had he seen a student embarrassed, when he was prepared for the examinations, which had been alike gratifying to the professors, the committee, and the candidates. Dr. Coventry wished the report to be referred to the committee, with instructions to publish it; and let Dr. Draper's letter, which formed a part of the re-

port, speak for itself. Dr. Rockwell said he hoped the letter of Dr. Draper would certainly be preserved as a valuable autograph. The report was referred.

Dr. Van Buren offered the following, which was adopted:

Resolved, That the refusal of the University Medical College of the city of New York to admit the committee appointed by this Society to be present at the examination of their students for medical degrees, is uncourteous to the Society, the reasons assigned unsatisfactory, and the effects upon the medical profession injurious.

A resolution was adopted, requesting delegates to draw the attention of county societies to this subject. A resolution was also passed, appointing a committee with authority to attend the examinations of the students for the degree of M. D. from such institutions in the city of New York as shall invite them. The Censors of the Southern District—Drs. Wood, Cock, Van Kleek, Kissam, Purdy, Purple, Stewart, Carter, Blakeman.

Dr. Cogswell presented the Annual Address before the Albany County Medical Society, by Dr. Quackenbush. On motion of Dr. Phelps, the thanks of the Society were presented to the Common Council of the city of Albany for the use of their chamber; and to Drs. Hun and Armsby, for their hospitable entertainment, which so largely contributed to the pleasure and social intercourse of the members of the Society. Adjourned.

EXPLANATORY.—The appearance of an article in this number criticising a review which was published in the MONTHLY for February, offers an opportunity to the Editor to make one or two statements which have not heretofore seemed necessary. In the first place, with regard to our review department, it is to be distinctly understood, that though we follow the usual custom, in this, as well as other countries, of withholding the names of our writers, still, each and every one of them is fully prepared to meet any statements he may make. Our reviewers are left entirely to their own course, and the opinions expressed are theirs individually, and not necessarily those either of the Editor or conductors. We shall give place to reviews written by *young* men of ability, as well as by the *seniors* of the profession, making no distinction in this respect, unless compelled so to do. Should such a distinction be forced upon us in reviews or communications, we shall not hesitate to give what encouragement we can to the young men, believing that those need aid who are struggling for a place, rather than those whose position is established and secure. Merit, not the age of the author, is the standard by which papers will be judged.

An explanation is also due from the editor on account of the tone of some allusions to one of the conductors of the MONTHLY, which appear in the paper referred to. Its author is entirely at liberty to criticise our reviews, and to such criticisms our reviewers are at liberty to reply—the option being left with them. To strictures upon others they will not reply, believing that each man should defend himself. Had the same remarks which in

Dr. Bauer's article are applied to Professor Carnochan been applied to any one not a conductor of the MONTHLY, we should have at once declined to publish it, because it might have placed us in a false position. No one of the conductors at all fears such remarks. Perhaps all are too much accustomed to them to care about them; and certainly it is better to meet them in print, than to be obliged to hunt them up in corners where they have been whispered. The editor will exert himself to the utmost to give free range to the discussion of scientific subjects, and will also endeavor to preserve that courtesy which should characterize such discussions.

The Maine Medical Association.—We have received a pamphlet containing the constitution and by-laws of this recently formed State Medical Association. A preliminary meeting was held at Brunswick, on the 18th of February, 1853, and the constitution and by-laws adopted on the 1st of June following; when the following officers were elected:

Dr. JAMES MCKEEN, Topsham, President.
Dr. JOHN T. GILMAN, Portland, } Vice Presidents.
Dr. N. P. MONROE, Belfast, }
Dr. H. H. HILL, Augusta, Treasurer.
Dr. N. R. BOUTELLE, Waterville, Secretary.
Dr. T. G. STOCKBRIDGE, Bath, Cor. Secretary.

No less than eighty-two members had signed the constitution at the first regular meeting; and we doubt not such enthusiasm will soon atone for so long a delay in the formation of an organization so important to the best interests of the profession of that large and flourishing State. We perceive that the list of members comprises a large proportion of the most distinguished names within its limits.

We are gratified to perceive in the pamphlet above alluded to, a resolution calculated to draw at once a line of demarcation between the regular and the irregular practitioners in the State, and to assign to every medical college that has graduated irregular practitioners, the odious distinction it deserves. It is high time that this abuse were exposed and corrected; and our pages will be open to the results of all such inquiries:

"*Resolved*, That the Standing Committee be required to obtain the names of all the medical practitioners within their respective districts, and ascertain at what medical school each of the irregular practitioners, as well as the regular, obtained his diploma; and that the facts thus obtained be published at such time as the committee may decide upon."

If we mistake not, a very similar resolution was passed by the N. H. State Medical Society at its annual meeting, in June last. We hope these committees will faithfully perform the task assigned to them. E. R. P.

NEW YORK PATHOLOGICAL SOCIETY.—*Session of Jan. 25.*

Prof. A. Clark announced the results of some investigations he had recently made upon the "fur," found in large quantities upon the tongue of a patient in a very low state from malignant disease.

This fur had a mossy, white appearance, and was even $\frac{1}{8}$ of an inch thick, or more, covering the mucous membrane of the lips and cheeks, as well as of the tongue; could easily be separated in large quantities, and was rapidly reproduced.

On examination with the microscope, Prof. Clark found it to consist of three distinct parts—1st. Epithelial scale; 2d. Vibriones, and 3d. An abundant vegetable growth.

The 1st element presented no peculiarities. The vibriones were very large and active. These animalculæ were doubtless developed in the animal fluids retained in connection with the other two elements.

The vegetable growth was, however, altogether peculiar. The spores from which the fibres were produced, were sometimes imbedded in the epithelial cells, and sometimes packed between them; and the quantity of this vegetable growth was truly astonishing.

Dr. Clark, supposing he had made a new discovery, consulted all the more recent works to ascertain if anything of the kind had ever been previously noticed, and at last found in Robin's work, published within a few months, an accurate description of the vegetable he had independently discovered. It is by M. Robin termed the oidium albicans.

Prof. Clark has seen the same growth in several cases since; though he has not again seen the animalculæ also. It is sometimes developed in small spots or tufts only, on the tongue, cheeks, or lips. It is very common, he thinks, in cases of extreme exhaustion from chronic esoteric diseases—*e. g.*, in infants exhausted by diarrhœa and dysentery. In the disease called "miguet" by the French, it is believed always to exist.

In the case first spoken of, the patient found a free application of cold cream caused the fur to fall off in large quantities. It has been found necessary, in France, to apply very harsh applications to remove it, as caustics and the like, and these often fail. Prof. C. thought it a very interesting fact, if proved to be such, that this vegetable may be destroyed by so mild a remedy.

We deem it pertinent here to call attention to the fact that the sulphurous acid will probably be found a certain destroyer of all kinds of vegetable growths which are developed upon mucous membranes, or in case of skin diseases. The fact that such growths are developed in the disease called by the French "muguet"—one of the forms of aphtha—has been known for several years; and Dr. Clark alluded to the very harsh measures

resorted to by French practitioners to destroy it. Dr. Jenner, of London, of London, has also ascertained recently that four different kinds of vegetable growths are developed in the four species of porrigo or tinea—the favosa, tonsurans, decalvans, and sycosa. The particular parasite discovered by Dr. Clarke, however, had been previously noticed only by Robin.

Dr. Jenner remarked in a lecture, more than two years since,* that "considerable benefit may be anticipated from the sulphurous acid in all diseases attended with the development of parasitic plants," and especially mentions porrigo. He has recently tried its efficacy in all the four varieties above mentioned of this disease, and with entire success.

He also finds the *sulphite of soda* (℥ j. to ℥ j. of water) will often cure *thrush*, by destroying the vegetable growth, in 24 hours. Here the sulphurous acid is set free in the mouth by the combination of the soda with the acid in its secretions.

We find that this acid was first recommended by Professor Graham, of London, to destroy parasitic vegetation, and for the cure of the cholera, at a time when this disease was believed by some to be produced by an entophite in the alimentary canal. Dr. Jenner finds it will check fermentation by destroying the torula cerevesiæ; and has also given it to destroy the sarcina Goodsirit.

We, therefore, think it settled, that in all skin diseases accompanied with the development of parasitic vegetation, the sulphurous acid is the remedy The gas is passed into water, till the latter is saturated; and a lotion is made, by adding, to one part of this, three parts of water. Whether still other skin diseases are of parasitic nature, remains to be decided; and we are happy to learn that our friend, Dr. J. B. Upham, of Boston, has entered upon the investigation of this interesting question.

This acid will also, we doubt not, prove curative of all diseases of parasitic origin, or mucous membranes: the sulphite of soda also answering the purpose in certain circumstances, as before explained. Moreover, this is a mild, and not a disagreeable remedy. And the cases requiring it will not be found to be rare, now that Dr. Clark has been the means of directing the attention of the profession in this country to this subject.

We should add, that the accidental presence of the vibriones in the decomposing animal fluids, in Dr. Clark's case, is a fact parallel to their occasional existence in the secretions of the vagina, or in cases of syphilitic ulcers.

Several interesting pathological specimens were presented before the Society. We regret that our space will no tallow of a particular account of them; nor of an interesting discussion by Drs. Sayre, Markoe, and Clark, in regard to the propriety of making free openings into joints, in case of destructive disease of the articular cartilages. E. R. P.

* Medical Times and Gazette, Aug., 1851.

Mr CARNOCHAN'S CASE OF RESTORATION OF THE ENTIRE LOWER LIP.

CANCER OF THE LOWER LIP.

No. 1.

Both Drawn from Life by Jas. Pinckert.

APPEARANCE OF THE PATIENT AFTER THE OPERATION.

Nº2.

The lines on the face shew the cicatrices resulting from the operation, as seen seven weeks after.

C. Currier's Lith. 83 Spruce Street, N.Y.